# Cleveland

## COMMUNITY COLLEGE

ACADEMIC BULLETIN
&
STUDENT HANDBOOK
1999 ✦ 2000

# GENERAL INFORMATION

## CLEVELAND COMMUNITY COLLEGE
### "An Equal Opportunity Educational Institution"

### DIRECTORY OF CORRESPONDENCE
### Telephone (704) 484-4000

Inquiries will receive prompt attention if addressed to the Administrative Offices below at Cleveland Community College, 137 South Post Road, Shelby, North Carolina 28152.

Academic Programs . . . . . . . . . . . . . . . . .Vice President, Academic Programs

Administrative Affairs . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .The President

Admissions  . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .Director of Admissions

Adult Basic Education  . . . . . . . . . . . . . . . .Coordinator, Basic Skills Programs

Adult High School Program  . . . . . . . . . . . .Coordinator, Basic Skills Programs

Entrance Procedures . . . . . . . . . . . . . . . . . . . . . . . . . . .Director of Admissions

Evaluation of Credits . . . . . . . . . . . . . . . . . .Dean of Enrollment Management

Financial and Business Affairs  . . . . . . . . . . . . . . . . . .Vice President, Finance/
Administrative Services

GED Exam . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .GED Examiner

Gifts and Bequests . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .The President,
The Executive Director of the
Cleveland Community College Foundation

High School Program . . . . . . . . . . . . . . . . .Coordinator, Basic Skills Programs

Human Resources Development Program  . . . . . . . . . . . . . . . .Recruiter, HRD

Industrial Training . . . . . . . . .Vice President, Industry and Community Service

Job Placement Service  . . . . . . . . . . . . . . . . . . . . . . . . . .Testing Coordinator

Non-Credit Courses . . . . . . . . . . . . . . . . . . . . .Dean of Continuing Education

Placement Testing . . . . . . . . . . . . . . . . . . . . . . . . . . . . .Testing Coordinator

Registration . . . . . . . . . . . . . . . . . . . . . . . . .Dean of Enrollment Management

Student Activities  . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .SGA Director

Student Affairs . . . . . . . . . . . . . . . . . . . . . . .Vice President, Student Services

Student Financial Aid  . . . . . . . . . . . . . . . . . . . . . . .Financial Aid Coordinator

Transcripts  . . . . . . . . . . . . . . . . . . . . . . . . .Dean of Enrollment Management

Veterans Affairs . . . . . . . . . . . . . . . . . . . . . . . . . . . . .Financial Aid Coordinator

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# CALENDAR OF EVENTS

## SUMMER TERM 1999

May 13        Thursday ..............................Registration
May 17        Monday ................1st Session – 11 wk Session –
                                        Summer Classes Begin
May 17        Monday ...1st Session – 11 wk Session – Late Registration
June 14       Monday .....1st Session – Last Day for Official Withdrawal
June 14       Monday ...............1st Session – Last Day to Change
                                        from Credit to Audit
June 23       Wednesday .........................1st Session Ends
June 24       Thursday ................2nd Session – Classes Begin
June 24       Thursday ..............2nd Session – Late Registration
July 5        Monday .......................Holiday (No Classes)
July 13       Tuesday ....................Pre-Pay Day for Fall 1999
July 14       Wednesday ..........................11 wk Session –
                                        Last Day for Official Withdrawal
July 14       Wednesday ..........................11 wk Session –
                                        Last Day to Change from Credit to Audit
July 15       Thursday ...............Orientation & Early Registration
                                        for New Students for Fall 1999
July 22       Thursday ....2nd Session – Last Day for Official Withdrawal
July 22       Thursday ..............................2nd Session –
                                        Last Day to Change from Credit to Audit
August 2      Monday ..............2nd Session & 11 wk Session End
August 3      Tuesday ..................................Graduation

## FALL SEMESTER 1999

August 5      Thursday ..............................Registration
August 19     Thursday .........................Fall Classes Begin
August 19     Thursday .........................Late Registration
September 4   Saturday ..............................No Classes
September 6   Monday ..........................Labor Day Holiday
October 4 & 5 Monday & Tuesday ..............Fall Break (No Classes)
                                        (Date May Change)
November 16   Tuesday ..................Pre-Pay Day for Spring 2000
November 17   Wednesday ..............Last Day for Official Withdrawal
November 17   Wednesday .......Last Day to Change from Credit to Audit
November 18   Thursday ...............Orientation & Early Registration
                                        for New Students for Spring 2000
November 25 - 27 Thursday - Saturday ..............Thanksgiving Holidays
December 15   Wednesday ......................Fall Semester Ends
              (Wednesday, December 15, is a Monday make-up)

# CALENDAR OF EVENTS

## SPRING SEMESTER 2000

| | | |
|---|---|---|
| January 5 | Wednesday | Registration |
| January 12 | Wednesday | Spring Classes Begin |
| January 12 | Wednesday | Late Registration |
| January 17 | Monday | Martin Luther King Jr. Holiday |
| March 21 - 25 | Tuesday - Saturday | Spring Break (No Classes) |
| April 11 | Tuesday | Pre-Pay Day for Summer 2000 |
| April 12 | Wednesday | Last Day for Official Withdrawal |
| April 12 | Wednesday | Last Day to Change from Credit to Audit |
| April 24 | Monday | Easter Holiday |
| May 10 | Wednesday | Spring Semester Ends |
| | (Wednesday, May 10, is a Monday make-up) | |
| May 11 | Thursday | Graduation |

## SUMMER TERM 2000

| | | |
|---|---|---|
| May 16 | Tuesday | Registration |
| May 17 | Wednesday | 1st Session & 11 wk Session – Summer Classes Begin |
| May 17 | Wednesday | 1st Session & 11 wk Session – Late Registration |
| June 14 | Wednesday | 1st Session – Last Day for Official Withdrawal |
| June 14 | Wednesday | 1st Session – Last Day to Change from Credit to Audit |
| June 23 | Friday | 1st Session Ends |
| June 26 | Monday | 2nd Session – Classes Begin |
| June 26 | Monday | 2nd Session – Late Registration |
| July 4 | Tuesday | Holiday |
| July 17 | Monday | 11 wk Session – Last Day for Official Withdrawal |
| July 17 | Monday | 11 wk Session – Last Day to Change From Credit to Audit |
| July 18 | Tuesday | Pre-Pay Day for Fall 2000 |
| July 20 | Thursday | Orientation & Early Registration for New Students for Fall 2000 |
| July 24 | Monday | 2nd Session – Last Day for Official Withdrawal |
| July 24 | Monday | 2nd Session – Last Day to Change from Credit to Audit |
| August 2 | Wednesday | 2nd Session & 11 wk Session End |
| August 3 | Thursday | Graduation |
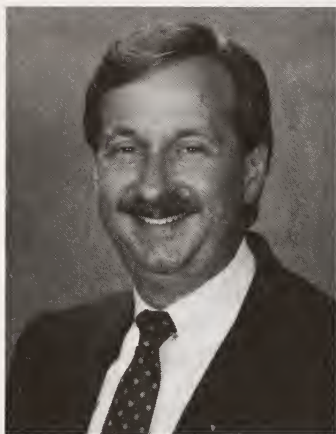
Dr. L. Steve Thornburg, Ed.D

## MESSAGE FROM THE PRESIDENT

### "WELCOME TO A VERY SPECIAL PLACE"

Attending Cleveland Community College is an exciting, challenging, and rewarding experience. You could not have made a better choice to help you prepare yourself for what lies ahead in the new century.

During 1999-2000, our students will witness the dawn of the 21st Century, the opening of a new classroom building, and the creation of an emergency training center. All of these, plus new programs, program expansions, and program improvements, are centered on providing our students with a dynamic and responsive learning environment.

Cleveland Community College is home to a dedicated and highly qualified faculty committed to making your learning experiences successful and meaningful. Our faculty work you as an individual and strive to help you develop your unique abilities. Our faculty constantly revise curriculum and devise new teaching strategies to make your experiences relevant and productive.

Cleveland's Student Services staff will assist you with counseling and guidance as you make short-term and life-long decisions. Our administrative and support staff will devote attention to maintaining and strengthening the quality of the educational environment.

The faculty and staff at Cleveland are here to help you to achieve your individual goals, to grow and develop as an individual, to prepare for your future, and to develop a life-long love of learning. We are here to serve students and their needs.

Each member of Cleveland's faculty and staff has an interest in your success and welcomes you to our College's community.

L. Steve Thornburg, Ed.D.

# HISTORY OF THE COLLEGE

The 1963 North Carolina General Assembly authorized a system of comprehensive community colleges, technical institutes, industrial education centers, and extension units to be established and placed under the jurisdiction of the State Board of Education.

The Cleveland Unit of Gaston College was established on July 1, 1965, as a result of the vision and effort of many individuals over several years. The Shelby Chamber of Commerce and the County Commissioners worked with the State Board of Education and Gaston College in establishing a unit of the college. Two buildings were rented by the County Commissioners at 118 North Morgan Street to start the school.

On July 11, 1965, James B. Petty was elected director of the Unit. The first classes began in September 1965, in the old Porter Brothers and McBrayer buildings. The number of classes and students has grown rapidly since that date.

On October 2, 1967, a local Board of Trustees was officially appointed and the Extension Unit became Cleveland County Technical Institute, a unit of the Department of Community Colleges of North Carolina.

In July 1969, the institute leased the County Home property at 137 South Post Road for a campus and moved to the new location.

Having secured a grant of $500,000 from the Cleveland County Board of Commissioners and matched by a like amount from the State of North Carolina, architects were commissioned in 1972 to plan a long-range building program on the present campus and the first two buildings for the new campus layout. The first two buildings were completed and placed in use for the Fall Quarter 1974.

In June 1977, the voters of Cleveland County approved a $5,000,000 bond referendum to construct the next two phases of the long-range development plan for the campus.

Construction began in summer 1979 on these buildings to add approximately 100,000 additional square feet of permanent facilities including a new Learning Resources Center, classrooms, shops, laboratories, snack bar, bookstore, and offices. Shop additions were placed in use for Fall Quarter 1980. The main additional construction, known as the Campus Center Building, was placed in use in March 1981. Formal dedication was held October 18, 1981.

On March 3, 1980, the Cleveland County Board of Commissioners voted to concur with the request by the Board of Trustees for a name change of Cleveland County Technical Institute to Cleveland Technical College.

By action of the state legislature, effective July 1, 1987, the College was authorized to become Cleveland Community College and to offer two-year college transfer programs. The first college transfer students were enrolled in the Fall Quarter 1987.

A Field House building was completed in July 1987 and became part of the College's physical education program.

Contracts were awarded in December 1987 for the construction of a new Student Activities Center building. This building was placed in use for Spring Quarter 1989. A Maintenance building was completed in August 1990. The James Broughton Petty Amphitheater was completed and dedicated April 24, 1991.

The founding president, Dr. James Petty, retired as President Emeritus on July 31, 1990. The College's second president, Dr. L. Steve Thornburg, assumed the presidency on August 1, 1990.

During years 1995, 1996, and 1997 the College pursued an extensive reengineering process to completely redesign every course and every program of study in order to accommodate converting from a quarter hour system to a semester hour system. Cleveland, along with all other community colleges in North Carolina, began offering semester credit hours in the summer term of 1997.

On May 20, 1997, the voters of Cleveland County again expressed their confidence in the College by approving a $3.1 million bond referendum to construct a new classroom building and an emergency training center that will provide job training and instructional space for the 21st Century.

## MISSION STATEMENT

Cleveland Community College — established in 1965 by and for the people of Cleveland County — is a comprehensive, public two-year college and member institution of the North Carolina Community College System. The College's mission is threefold: (1) to help students achieve professional and personal goals by providing quality, accessible educational programs and services, (2) to serve as an agent for economic development by responding to the educational and training needs of business and industry, and (3) to contribute to the improvement of the quality of life in Cleveland County by actively participating in collaborative community initiatives.

CCIPSS (Cleveland's Continuous Improvement Plan for Student Success) Strategic Goals:

I. To offer quality educational and training programs designed to meet the needs of a diverse student population and which are responsive to the changing educational and training needs of the College's service area.

II. To provide comprehensive student support services with an emphasis on access and a focus on student success.

III. To provide a comprehensive program of professional development and performance evaluation for all College personnel.

IV. To provide a quality work environment with the necessary infrastructure—both space and technology—, equipment, and learning resources to support the Mission of the College.

V. To serve as a prominent educational and training resource in the economic development of the College's service region.

VI. To be an integral part of Cleveland County's lifelong learning processes (early childhood through late adulthood) which enhance the community's quality of life.

VII. To provide a sound and comprehensive institutional effectiveness program dedicated to student success and the assurance of continuous improvement in all areas of the College.

## GENERAL ADMINISTRATION - PURPOSE AND GOALS

General Administration at Cleveland Community College includes the President's Office, Planning and Institutional Effectiveness, and the Cleveland Community College Foundation. Under the leadership and direction of the President, General Administration serves the College through its primary functions of planning, research, and resource development in fulfilling its *mission of ensuring student and institutional success*. Both the Assistant to the President for Planning and Institutional Effectiveness and the Executive Director of the Cleveland Community College Foundation report directly to the President and the Assistant to the President serves on the president's Policy Council with the College's vice-presidents.

The Office of Planning and Institutional Effectiveness is responsible for facilitating the College's planning process, generating information for internal and external constituencies, and monitoring quality improvement initiatives.

Founded in 1983 to promote private support for the College's educational goals, the Cleveland Community College Foundation provides a margin of excellence for the College by soliciting support for those projects which have as a focus the Cleveland Community College students and graduates who are a key to the continued success of business and industry in our community.

### Goals:

1. Lead the College in refining the Institutional Effectiveness Plan with a focus on three major areas: planning, research, and assessment/evaluation.
2. Lead the College in refining the Development Plan with a focus on three major areas: student scholarships, program development, and faculty development.
3. Continuously evaluate and improve services.
4. Provide leadership that promotes systems thinking to ensure a more effective Student Information System.

5. Continue staff development that encompasses current national trends and issues specifically related to institutional effectiveness and institutional advancement.
6. Identify and acquire human and fiscal resources to meet student needs.
7. Continuously evaluate College/community partnerships and events to improve and expand services to students and the community.

## ACCREDITATION

Cleveland Community College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia, Telephone Number 404-679-4501) to award associate degrees.

## VISITORS

Visitors need to receive permission from Student Services prior to visiting classrooms, shops, or labs.

## CHILDREN ON CAMPUS

Children under sixteen must be accompanied by an adult at all times. Children are not allowed in classrooms or in the gymnasium except for approved events.

## NIGHT OFFERINGS

The College offers an extensive night program which includes most of the credit and non-credit courses given in the daytime.

The availability of credit courses at night allows the student who must work while attending school the opportunity to coordinate school activities with employment. A student may enroll for both day and night classes in most programs.

With the exception of Allied Health Programs (ADN, PN, RAD, and PHLEB), it is possible to complete all work toward a degree or diploma by attending at night. The rate of progress through a program will depend upon the number of courses taken each semester. A reduced load will require a longer period to complete program requirements.

## CANCELLATION OF CLASSES

The College reserves the right to cancel any class, day or night, for which there is insufficient enrollment.

# INCLEMENT WEATHER

The College President will make the decision as to whether or not classes will be held during periods of inclement weather. Announcements will be made on local radio and television stations. If day classes are canceled, night classes are automatically canceled.

# NOTICE OF COLLEGE REGULATIONS

The College has a genuine interest and concern for the integrity of all students; therefore all regulations found in this catalog and student handbook, and announcements posted on bulletin boards will be followed by all students. Each student is responsible for becoming familiar with these publications and for reading official announcements in order to stay informed of current policies.

# COMPUTER NETWORK USE

The College provides computer, network, and Internet access to students, faculty, staff, and other authorized individuals in support of instructional, educational, administrative, and research purposes of the College. Use of College facilities and equipment for other purposes is not acceptable. Computer, network, and Internet access is a privilege, not a right, which may be revoked at any time for abusive conduct. Abusive conduct includes, but is not limited to, the following: altering equipment or peripherals; installing a "virus" or other software; running files to alter the system; placing unlawful information on a system; using abusive or objectionable language in messages; hindering other users' ability to work; causing congestion on the networks; using other people's computer resources without authorization; violating software license copyrights; entering accounts without full authorization; using College resources for a commercial venture or for personal profit; allowing others to use a password or account other than their own; violating system security; transmitting any unlawful, harmful, threatening, abusive, harassing, defamatory, vulgar, obscene, hateful, racial, ethnical, or otherwise objectionable material; distributing advertisements; displaying materials which may be construed as obscene; misrepresenting the identity of the user; or using the network for game playing.

The administrators of the College's computer systems may view users' files, read mail, monitor keystrokes, view screens, and otherwise observe all users' activities. If a conflict arises between system security/operation and the integrity of an individual's data, keeping the system operational will take precedence. Ownership of the contents of all disk storage on the network is retained by the College.

Violations will be treated as academic misconduct with immediate loss of privileges. Any misdemeanor or felony violations will be reported to the proper authorities.

## COMMUNITY ACCESS CABLE CHANNEL

The Broadcasting and Production Technology program at Cleveland Community College is responsible for the operation of Time Warner Cable's local community access channel which provides capabilities for delivery of educational, cultural, and public service programming to cable subscribers throughout Cleveland County.

## NON-DISCRIMINATION POLICY

From its founding, Cleveland Community College's Board of Trustees and staff have recognized the importance of equal opportunity in all phases of the College's operations and have adhered to a policy of non-discrimination on the basis of race, color, sex, age, religion, national origin, physical or mental disability, or other non-relevant factors. This policy continues to apply to both students and employees at all levels of the school's operations. Anyone who believes this policy has been violated may seek satisfaction through the Due Process procedures outlined in this catalog.

## AMERICANS WITH DISABILITIES ACT/ SECTION 504 REGULATIONS

Cleveland Community College, in compliance with The Americans with Disabilities Act and Section 504 Regulations, does not discriminate and is dedicated to providing equal educational and employment opportunities for qualified adults. The College will make reasonable accommodations in its programs, services and facilities for disabled students and disabled employees who are otherwise qualified. Students with special needs should contact the Student Services Department for assistance such as notetakers, readers, interpreters, etc.

## CRIME AWARENESS/CAMPUS SECURITY ACT

Cleveland Community College, in compliance with The Crime Awareness/Campus Security Act, has developed policies and procedures to prevent and report on-and-off-campus crimes. Annually, the College distributes to all College staff and students statistical data on reported criminal offenses in the Drug-Free and Crime Awareness Booklet. This booklet is made available to all prospective employees and to prospective students. The College presents information to students and staff at orientations regarding campus security/safety, crime prevention, alcohol and drug abuse education, sexual assault prevention, rape awareness, and procedures to follow if a sex offense occurs.

# DRUG-FREE WORKPLACE POLICY

Cleveland Community College, in compliance with the Omnibus Drug Initiative Act of 1988 (Public Law 100-690) and The Drug-Free Schools and Communities Act Amendment of 1989 (Public Law 101-226) certifies that the agency has adopted and implemented a program to prevent the unlawful possession, use, or distribution of illicit drugs and alcohol by students and employees. The College will:

1. Annually distribute, in writing, to each student and employee, standards of conduct that clearly prohibit the unlawful possession, use or distribution of illicit drugs and alcohol on campus property or as part of any campus activity.
2. Establish a drug-free awareness program to alert employees and students to the dangers of drug and alcohol abuse and make them aware of available drug counseling programs.
3. Require employees who know of a fellow worker's on-the-job use of drugs or alcohol to notify the employer.
4. Impose sanctions or require rehabilitation of an employee or student who is convicted of campus or workplace-based drug or alcohol abuse.
   Cleveland Community College is engaged in a continuing campaign against substance abuse. The campaign includes educational seminars and public awareness events.
   Communication methods may include:
1. Annual written notification
2. Information at orientation of new students
3. Emphasis during convocations
4. Classroom units in appropriate courses
5. Drug Awareness Days

# BLOOD BORNE PATHOGENS AND HAZARDOUS MATERIALS

Body fluid spills, hazardous chemical spills, or spills of unknown fluids should be reported immediately to the receptionist - Dial O - and evacuate the area until College personnel arrive.

# COMMUNICABLE DISEASE POLICY

Policies regarding diseases at Cleveland Community College are as follows:

Persons infected with a communicable disease will not be excluded from enrollment or restricted in their access to college services or facilities unless medically-based judgments in individual cases establish that exclusion or restriction is necessary to the health and safety of the individual or to the health and safety of other members of the College community.

Any student, College employee (either full-time or part-time) and any employee of contractors or contracted services who knows or has reasonable basis for believing that he or she is infected with a communicable disease has the responsibility of reporting this fact, on a confidential basis, to the appropriate dean or vice president.

Persons who know or have reasonable basis for believing that they are infected with a communicable disease are expected to seek expert advice about their health circumstances and are obligated ethically and legally to conduct themselves responsibly in accordance with such knowledge for the protection of other members of the community.

## SEXUAL HARASSMENT

The policy of Cleveland Community College, consistent with its effort to foster an environment of respect for the dignity and worth of all members of the college community, prohibits sexual harassment of students and employees of Cleveland Community College and views sexual harassment as unacceptable conduct which will not be tolerated. The policy, definition of, and complaint procedures can be found in the Cleveland Community College Policies and Procedures Manual, and students should contact the Vice President of Student Services for information and procedures.

## DUE PROCESS PROCEDURES ON GRIEVANCES

1. Students or employees wishing to appeal a decision affecting their status at Cleveland Community College should first attempt to resolve the situation with the supervisor, administrator, instructor or whoever is involved.
2. If not satisfied, and if the individual wishes to appeal, the appeal shall be made in writing within two weeks to the chairman of the Due Process Committee, the Vice President of Student Services. The letter should include a summary of all pertinent dates and information concerning the incident. A hearing will be scheduled within two weeks before the Due Process Committee. The Due Process Committee will recommend action to the President.
3. Further appeal may be made in writing within two weeks of the Due Process Committee's decision, directly to the President.
4. Final appeal may be made in writing, within two weeks of the President's decision, directly to the Chairman of the Board of Trustees. The Board will make a decision based on the petitioner's written appeal and the forwarded recommendations of the President and the Due Process Committee.

# PERSISTENCE RATE FOR CURRICULUM PROGRAMS

Information regarding the average rate of persistence for curriculum programs is located in the office of the Vice President for Student Services.
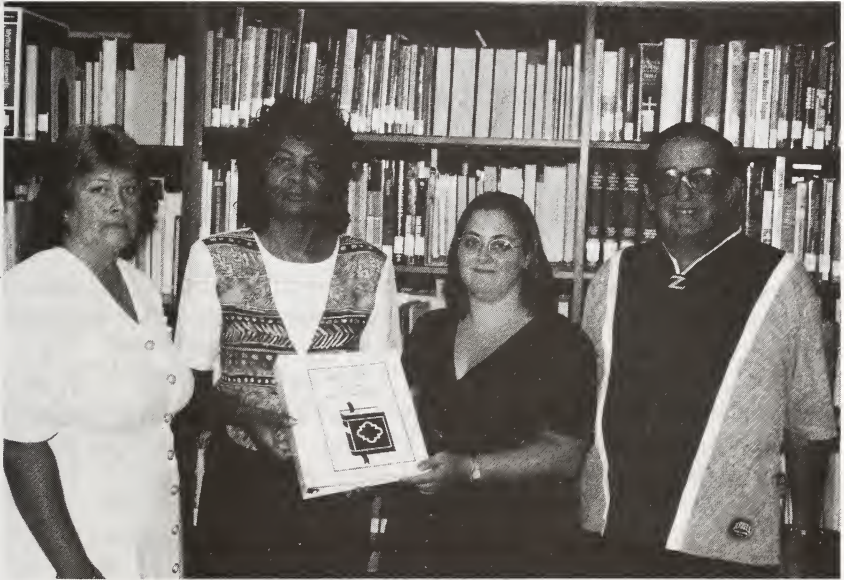
# ADMISSIONS

## ADMISSIONS INFORMATION

## POLICY AND PROCEDURES

Cleveland Community College operates under an "open door" admissions policy to offer college transfer, occupational and adult education to all persons who are able to profit from instruction. Placement of students in the various programs of instruction includes a special emphasis on career guidance and individual admissions counseling. The objective is to assist the student in establishing realistic goals to assure reasonable success in the particular program of instruction the student desires to pursue.

As part of the admissions process for curriculum students, placement tests may be required. Transcripts of previous education are required, and a personal interview is suggested with each student.

Application for admission forms and detailed information on programs of instruction offered may be secured by writing to: Student Services, Cleveland Community College, 137 South Post Road, Shelby, North Carolina 28152 or by calling (704) 484-4081.

### ADMISSIONS REQUIREMENTS FOR ALL CURRICULUM PROGRAMS

1. Be at least eighteen years of age, or the applicant's high school class must have graduated. Dual enrollment is allowed for high school students with semester permission of the high school principal.
2. High School graduation or its equivalent is required for the Practical Nursing curriculum and the Associate in Arts, Associate in Science, Associate in General Education, Associate in Applied Science degree curriculums, Phlebotomy and technical diploma or technical certificate programs.
3. High School graduation or its equivalent is not required for vocational diploma and vocational certificate programs.
4. **All** students enrolling in curriculum programs must have their high schools send official transcripts (showing graduation date or highest grade completed), or must present an official GED score of 225 or above, or a state-issued GED certificate. In addition, official transcripts of all colleges attended must be submitted.
5. Applicants who are applying to the Associate in Arts, Associate in Science, Associate in General Education, Associate in Applied Science, Practical Nursing, Phlebotomy and technical diploma or technical certificate programs must take **placement tests** in English, mathematics, reading and algebra.

**Exceptions:**

a. Allied Health applicants (those who are applying for Associate Degree Nursing program, Practical Nursing program, the Radiography program, and the Phlebotomy program) must satisfy separate, previously-established qualitative and quantitative admission requirements. These applicants are required to meet the academic and technical standards of the Allied Health curriculums.

b. Applicants (excluding Associate Degree Nursing, Practical Nursing, and Radiography applicants) who have scored 450 on the verbal section of the SAT are not required to take the English and reading placement test. Applicants (excluding Associate Degree Nursing, Practical Nursing, and Radiography applicants) who have scored 450 on the mathematics section of the SAT are not required to take the mathematics and algebra placement test.

c. Applicants (excluding Associate Degree Nursing, Practical Nursing, and Radiography applicants) who have scored 19 on the American College Test are not required to take any placement test.

d. Applicants (excluding Associate Degree Nursing, Practical Nursing, and Radiography applicants) who have earned at an accredited college or university at least 12 quarter or 9 semester hours of collegiate-level course work with at least a grade of "C" on each course are not required to take placement tests.

e. Applicants (excluding Associate Degree Nursing, Practical Nursing, and Radiography applicants) who transfer in a college-level mathematics course with a "C" or better are not required to take the math or Algebra placement tests. Applicants who transfer in a college-level English course with a "C" or better are not required to take the English or reading placement tests.

f. Applicants (excluding Associate Degree Nursing, Practical Nursing, and Radiography applicants) who have successfully completed developmental mathematics, English, reading, or algebra courses at an accredited college or university are not required to take Cleveland Community College's placement tests or complete the developmental course(s).

g. All Allied Health applicants must repeat science courses which are more than five years old.

h. Special credit students (those who are not pursuing a degree, diploma or certificate) are not required to take placement tests. Some individual courses do, however, require prerequisites or testing.

If the applicant does not pass the appropriate placement test(s) or meet exceptions as stated above, the applicant must enroll in and successfully complete the applicable developmental course(s).

6. On acceptance, a complete physical and dental examination is required for Practical Nursing applicants. A complete physical examination is required for Radiography, Phlebotomy, and Associate Degree Nursing (RN) accepted applicants.

7. Selected applicants to Allied Health programs (ADN, PN, and RAD), excluding Phlebotomy, must have a personal interview with an admissions office representative and a faculty member after PSB testing and ranking. PSB testing is not required for Phlebotomy applicants.

8. Personal references are required for Allied Health applicants (ADN, PN, and RAD), excluding Phlebotomy.

9. The College reserves the right to refuse admission to a student if it appears that such action is in the best interest of the College and/or the student. Any student so refused may appeal this action through Due Process.

10. Specific procedures for admission to continuing education programs will be found under that section of this catalog.

## ADMISSION PROCEDURE FOR ALL CURRICULUM PROGRAMS

1. Submit completed application form. Social Security number is voluntary and is used for record-keeping purposes.

2. Applicants may request a counseling interview in Student Services. All Allied Health applicants ADN, PN, and RAD), excluding Phlebotomy, are required to attend an Allied Health informational meeting. The interview is required for selected Allied Health applicants (ADN, PN, and RAD) after PSB testing. Phlebotomy applicants do not take the PSB.

3. Have official transcripts of all previous education (high school/GED and college) mailed to the College prior to the completion of the first semester. The applicant who is not pursuing a diploma, degree, or certificate should not have transcripts sent unless the transcript is needed to prove that course prerequisites have been satisfied.

4. Degree-seeking applicants, Phlebotomy and technical diploma or technical certificate applicants must take placement tests in English, algebra, math and reading or must satisfy the exceptions stated in the Admissions Criteria. Associate Degree Nursing, Practical Nursing and Radiography applicants must take placement tests.

5. Receive a letter of acceptance from the Director of Admissions prior to the end of the student's first semester. Allied Health applicants must be accepted prior to Fall Semester.

# PROVISIONAL ACCEPTANCE

Applicants for admission who have not submitted high school transcripts and/or GED scores and college transcripts before the beginning of the semester for which entry is desired are granted provisional acceptance for one academic semester. All admission requirements must be met within that semester in order to be eligible to register for the following semester. There is no provisional acceptance available for Allied Health applicants.

# SPECIAL CREDIT CLASSIFICATION

Special credit students are those who are enrolled for course credit but not in a curriculum leading to the diploma, certificate, or to the associate degree. Students enrolled in this status will normally be required to meet the prerequisites for the course or to demonstrate a necessary level of competence although they do not have to meet all the admission requirements for curriculum programs.

# READMISSION

Any student who officially withdraws from the College and later wishes readmission should contact Student Services. Readmission conditions will depend upon the individual circumstances, but generally a student is eligible to return at such a time as an appropriate course schedule can be worked out. Students who wish to reapply to an Allied Health program (ADN, PN, RAD and PHLEB.) must see the Director of Admissions. Students who qualify may be readmitted to the Practical Nursing or the Associate Degree Nursing program only once.

A former student will not be readmitted until all former and current expense obligations to any program or activity under the administrative jurisdiction of the College have been satisfied.

Students who have been academically suspended may enroll again after a one-semester absence. Allied health students who have been academically suspended must confer with the Director of Admissions.

Any student who is financially indebted to the College by failure to completely meet any outstanding debt such as the following: bad check, tuition, bookstore, library, activity, graduation, parking fines, or any required payment to the College will not be eligible for readmission or graduation nor acquire any transcript until such indebtedness is completely cleared.

# ACADEMIC REGULATIONS

## DROP-ADD PERIOD

Students may add courses and change their class schedules during the late registration period. Students may drop courses until the last three weeks of a semester. If a student stops attending a course within the last three weeks of a semester, he/she will receive a grade for the course.

All students must complete forms in Student Services to drop or add a course or change a class schedule.

## GRADING SYSTEM

Grading the performance of students in course work is the responsibility of individual faculty members.

At the end of each semester students will be evaluated in each course as follows:

| Letter Grade | Numerical Grade | Explanation | Quality Points |
|---|---|---|---|
| A | 93-100 | Excellent | 4 points per sem./hr. |
| B | 85-92 | Good | 3 points per sem./hr. |
| C | 77-84 | Average | 2 points per sem./hr. |
| D | 70-76 | Below Average | 1 point per sem./hr. |
| F | Below 70 | (No Credit) | 0 point per sem./hr. |
| I | Work not completed | Non-completion of course requirements. Requirements must be completed in next semester or receive an F. | 0 point per sem./hr. |
| W | | Official Withdrawal | 0 point per sem./hr. |
| CE | | Credit by Exam | 0 point per sem./hr. |
| AU | | Audit | 0 point per sem./hr. |

Any student who receives an "I" may request to negotiate a contract with the instructor involved. Contracts negotiated between the student and the instructor will specify a definite completion date for the requirements in addition to the types of activities set forth by the instructor to help the student achieve the minimum objectives of the course. If the student does not complete the minimum objectives in the negotiated time period, the student will be dropped from the course and "F" will be entered on the record. Upon completion of the contract in the specified time, the instructor will notify the registrar to change the "I" to a letter grade. The contract completion date must be within the semester following receipt of the "I".

# GRADE POINT AVERAGE

The GPA is the most important example of a student's academic progress. The computation of a GPA is shown below as an example to simplify the average. It is determined by dividing the total number of grade points earned by the total number of semester hours attempted, excluding I, W, CE, S, U, AU grades, and grades made on developmental courses. The cumulative GPA is based on all grades while a student is enrolled in a curriculum. The current GPA is an indication of one semester of work in a curriculum.

## EXAMPLE OF COMPUTING THE GPA

| Course | Grade | Credit Hrs. Attempted | GP per Credit Hour | | Grade Points Earned |
|---|---|---|---|---|---|
| ENG 111 | A | 3 | x4 | = | 12 |
| ACC 120 | B | 4 | x3 | = | 12 |
| CIS 115 | C | 3 | x2 | = | 6 |
| BIO 163 | D | 5 | x1 | = | 5 |
| | | 15 | | | 35 |

$$\frac{\text{Grade Points}}{\text{Hours Attempted}} = \text{GPA} \qquad \frac{35}{15} = 2.33$$

# CLASS ATTENDANCE POLICY

Absences are a serious deterrent to good scholarship; it is impossible to receive instruction, obtain knowledge or gain skills when absent. Although there are numerous reasons for absences such as personal illness, death in the family, work conflicts, or unexpected emergencies, all absences will be counted in the 30% maximum. A student, who, during a semester, incurs in any course an absence in excess of thirty percent (30%) of the class hours for that course may be dropped from the course (without credit).

Absences may be considered legitimate and eligible for makeup at the discretion of the instructor. The student is responsible for seeing the instructor, giving the reason for the absences, and requesting a make-up assignment. This is to include students on rotating shift work schedules.

An instructor may refuse admission to class to any student who arrives more than ten minutes late to a class. One-half day's absence will be counted if a student leaves thirty minutes or more early.

The student may appeal any decision under these policies to the Due Process Committee.

# ACADEMIC PROGRESS

The following cumulative grade point averages are the minimums which must be attained in order for a student to make reasonable progress toward graduation. A 2.00 grade point average is required for graduation.

# ASSOCIATE DEGREE PROGRAMS

| Cumulative Semester Hours | Minimum Grade Point Average |
|:---:|:---:|
| 1-18 | 1.40 |
| 19-36 | 1.60 |
| 37-45 | 1.80 |
| over 45 | 2.00 |

## DIPLOMA PROGRAMS

| | |
|:---:|:---:|
| 1-18 | 1.60 |
| 19-30 | 1.80 |
| over 30 | 2.00 |

## CERTIFICATE PROGRAMS

Students enrolled in certificate programs must maintain a 2.0 cumulative GPA to achieve satisfactory academic progress.

Any student who falls below the specified minimum at the end of any semester will be placed on academic probation for the following semester.* To be removed from probation the student must attain the appropriate minimum grade point average by the end of the probation semester; otherwise, the student will be suspended from that program for at least one semester.

Re-entry in cases of suspended students is handled on an individual basis. Suspended students should contact the Dean of Enrollment Management prior to re-enrolling.

The privilege of appeal is provided to the suspended student. The student is required to write a letter to the Due Process Committee explaining the appeal and must appear before the Committee in person.

## COURSE REPEAT REGULATIONS

A student may repeat a course taken for credit or audit. A course may be taken a total of three (3) times for credit and/or audit. The appropriate academic dean must justify, in writing, any exception to this policy. The written justification will be placed in the student's academic file in Student Services. Repeated courses will appear on the student's transcript. Each grade will be shown on the transcript, but only the last grade (excluding audits) will be computed into the cumulative grade point average.

[Students accepted into certain curriculum programs—such as Associate Degree Nursing, Practical Nursing, and Radiography — are precluded from repeating some courses. Regulations are stated in their program application materials.]

*In the Radiography program, every major specialty course must be passed each semester before the student can enroll for the following semester. In the ADN (Registered Nursing) and Practical Nursing programs, a grade of C must be made on every major specialty course each semester before the student can enroll for the following semester. Students in these programs who are academically ineligible to enroll for the following semester may reapply for admission. ADN and Practical Nursing students may be re-accepted only once. ADN students must earn a minimum grade of C on all Biology courses.

## AUDIT STUDENTS

A student may elect to audit a course or courses by notifying Student Services and the appropriate instructor(s). Those auditing receive no credit and do not have to take any examinations; otherwise participation in class is on the same basis as a credit student. The fee for auditing is the same as the fee for credit. By completing the appropriate form in Student Services and notifying the appropriate instructor, a student may change a course classification from credit to audit until the last three weeks of the semester in which he/she is enrolled in the course. Students may change from audit to credit classification for an enrolled course during the add period only.

## COURSE SUBSTITUTIONS

Courses may be substituted with approval of the advisor, dean, and registrar.

## CREDIT HOURS, CONTACT HOURS, AND COURSE LOAD

Each course listed is followed by a notation on the number of semester hours credit it carries. Normally, the number of semester hours earned is based on the number of class, laboratory or shop hours spent under the supervision of the course instructor per week for the semester.

Usually one (1) semester hour credit is given for each hour of class per week, or for each two hours of laboratory or shop per week.

Contact hours are the number of actual clock hours a student is in attendance during one week.

Students enrolled for 12 or more credit hours are classified as full-time students. Students enrolled in less than 12 credit hours are classified as part-time.

## THE OFFICIAL ACADEMIC RECORD (TRANSCRIPT)

A transcript of grades earned each semester is available in Student Services.

An official record of all the student's courses, credits, grades, current and cumulative Grade Point Average (transcript) is available at all times in Student Services. The record may also help determine eligibility for any club activity or club membership that requires specific scholastic standards. Copies of the official record are available to the student upon written request — at no charge.

Records of Progress (Grade Reports) are provided by Cleveland Community College on all students — including veterans. Progress records (grade reports) are furnished to students (including veterans) at the end of each semester.

## POLICY ON RETENTION AND
## DISPOSAL OF CURRICULUM RECORDS

The retention and disposal of students' records at Cleveland Community College complies with the General Statutes of North Carolina as well as the North Carolina Community College System guidelines. Official transcripts are secured and kept permanently in Student Services. Other materials such as registration forms, high school and other college transcripts are destroyed after five years.

## RELEASE OF INFORMATION FROM
## OFFICIAL STUDENT RECORDS

The College recognizes the responsibility for maintaining records for each student to preserve authentic evidence of the events and actions that are important and can contribute to the efforts to educate the student and to facilitate the achievement of the educational goals of the College. The following general principles and procedures govern the release of information from official student records:

1. Written consent from the student is required before a transcript or information may be released from the official, academic record. Exceptions are:
   a. The Dean of Enrollment Management may release information from official records including reports of academic directory information from student records which include the following: student's name, address, telephone number, date and place of birth, major field of study, participation in officially recognized activities and sports, dates of enrollment, degrees and awards received, and the most recent previous educational agency or institution attended by the student.
   b. The Dean of Enrollment Management may release information pertaining to honor achievements for publications.
2. A hold may be applied to the release of a transcript or other information requested from an official record for a student who has an overdue indebtedness to the College. Such a student continues to have the right to see the official record upon request.
3. The use and release of information from student official records will be determined as outlined above and in compliance with state and federal legislation relating to such records. Action in situations that may not have been anticipated and/or defined above will at all times be based upon the best knowledge available to the professional staff of the College.

## ADVANCED PLACEMENT COURSES

Students who have taken advanced placement courses in high school and have made satisfactory scores on the College Board Advanced Placement Examination may receive credit for comparable

courses in the student's curriculum at Cleveland Community College. Students who wish to receive credit for advanced placement courses should contact the Dean of Enrollment Management in Student Services for a list of approved Advanced Placement courses and test scores.

## CREDIT BY EXAMINATION

A student may be allowed credit toward graduation for past schooling, work, or military experience through proficiency examinations. The student should confer with the appropriate Academic Dean for qualifications for these provisions and to be informed of the procedure to follow.

A grade symbol of CE (credit by examination) will be awarded for courses for which credit is given on the basis of proficiency examination. The course hours for such courses posted as CE will be computed toward graduation requirements but not for the computation of Honors, nor for computation of overall GPA.

## CREDIT FOR EXPERIENTIAL LEARNING

Cleveland Community College endorses the concept of credit for experiential learning in recognition of valid learning experiences to areas which are applicable to the degree/diploma program being completed. Credit is not extended automatically.

To receive credit for experiential learning, a student must submit to the Registrar and Academic Dean a typed summary of experiences learned, proof that the experience did occur and demonstrate skills learned (if requested). The Registrar, after consultation with the Dean, may grant full credit for a comparable course(s) as a transfer course(s).

The student will receive hours earned on the official transcript—but no grade. The hours will be computed towards graduation requirements but not for the computation of honors nor the overall GPA. There is no charge for receiving this credit.

## HONORS PROGRAM

Cleveland Community College is one of the few North Carolina Community Colleges to offer academically advanced students an Honors Program. Upon faculty recommendation, students of exceptional academic accomplishments or promise are invited to enter. Those who do so face challenges designed to test and develop their skills in ways not ordinarily available. Through faculty mentoring and special Honors courses, these students enjoy a special learning community. The rewards of participation are many: enhanced self-esteem, collegial development among peers, and a competitive edge when leaving the College. The Honors Program is open to students in all academic programs.

# COOPERATIVE EDUCATION

Cooperative Education (Co-op) is designed to give students enrolled in many programs within the College a chance to work on a job while completing their degrees. This combination of classroom instruction with practical/related work experience provides numerous benefits to participating students.

**Eligibility.** Any full-time students who are enrolled in programs offering Co-op for academic credit and who have earned a minimum of 12 hours toward their degree requirements are eligible to participate if they meet the following conditions:

1. Approval of instructor coordinator
2. Have a minimum 2.0 GPA
3. Approval from program director

**Academic Credit.** Credit hours for cooperative education work periods are determined by dividing the average number of hours worked per week by 10 and rounding to the nearest whole number. Co-op students may earn from two to twelve semester hours of Co-op credit toward their degree requirements. (See individual curriculum programs for number of elective hours available.)

# DROP/WITHDRAWAL

Students may drop a course prior to the 10% point of the course. The course is deleted from the student's official transcript. Official drops must be processed through Student Services.

Students desiring to withdraw from a course after the 10% point should contact Student Services to complete necessary forms. Withdrawal with a grade W will be allowed after the 10% point of the course and before the last three weeks of the semester.

Students who stop attending a course(s) or whose absences exceed the allowed maximum during the last three weeks of the term will receive a grade for the course.

# TRANSFER CREDIT TO
# CLEVELAND COMMUNITY COLLEGE

Cleveland Community College permits admission with transfer credit for students from member institutions of the North Carolina Department of Community Colleges and other accredited institutions. Students must have official transcripts sent to Cleveland for evaluation prior to the end of the first semester in which they are enrolled. Courses accepted for transfer credit must closely parallel those for which credit is sought at the College. Evaluation is made by the Registrar and appropriate Academic Dean. Grades and quality points do not transfer. Credit is given to accepted courses in which a C or better was made.

For program completion in associate degree, diploma and certificate programs, at least 25% of the required hours for graduation must be earned at Cleveland.

## NOTIFICATION OF TRANSFER CREDIT

All transfer students will receive, prior to the completion of their first semester, an "Evaluation of Transfer Credit" form denoting hours and courses accepted for transfer credit. Questions regarding transfer credit may be addressed to the Dean of Enrollment Management in Student Services.

## CLEP

Credit may be allowed for up to 6 semester hours of college work based on appropriate scores on the CLEP General Examinations when appropriate to the student's program of study. Maximum credit for CLEP Subject Examinations is 22 semester hours when appropriate to the student's program of study.

## MAXIMUM CREDIT ALLOWED FOR ALL FORMS OF NON-TRADITIONAL LEARNING

A maximum of 32 hours may be awarded for all forms of non-traditional learning.

## MILITARY EXPERIENCE

Military training and experience may earn semester hour credit as determined by the Registrar and appropriate Dean. Course credit will be given if the learning experience or training closely resembles the student's program of study.

## SERVICEMEMBERS OPPORTUNITY COLLEGES

Cleveland Community College has been designated as a member of the Servicemembers Opportunity Colleges (SOC) General Registry—a network of institutions sponsored by the American Association of Community Colleges. Servicemembers are encouraged to take college level courses offered by accredited institutions and made available to military personnel through SOC. Records are evaluated, files are retained, counseling is provided, and recognition is given for learning through noninstitutional sources when appropriate. Transcripts must be sent to the Dean of Enrollment Management directly from the institution offering the course.

## TRANSFER OF CREDIT FROM A.A. AND A.S. DEGREE PROGRAMS TO OTHER COLLEGES AND UNIVERSITIES

A student who desires to transfer course work from Cleveland Community College's A.A. and A.S. degree programs to a four-year college or university should contact a transfer counselor in Student Services. The counselor will assist the student in the transfer process.

Four-year college and university academic bulletins and transfer agreements are on file in Student Services.

## TRANSFER CREDIT TO OTHER COLLEGES FROM TECHNICAL AND GENERAL EDUCATION PROGRAMS

Even though the technical degree programs are not planned as transfer programs, some colleges accept credit toward the bachelor's degree, courses completed in a technical program or in the general education program at Cleveland Community College. Most of these colleges consider each applicant's record individually, and the courses for which credit is sought must be similar to the course(s) offered by that institution. Some colleges give credit on the basis of examinations. Many colleges give full credit for the Associate in Applied Science degree or Associate in General Education degree toward a Bachelor of Arts, Bachelor of Science, or Bachelor of Technology.

Some colleges will consider some transfer courses on an individual evaluation basis. Any student interested in pursuing that possibility should talk with the department chairman of the planned major field at the particular college to which transfer is desired.

## TRANSFER RESPONSIBILITY

The College will cooperate with each student in planning a transfer program. However, it is the responsibility of the student to determine what courses and credit will transfer to the receiving institution.

The acceptance of courses taken at Cleveland Community College is determined solely by the institution to which the student transfers.

The student planning to transfer will have less difficulty if he/she will follow these steps:

1. Decide early which senior college to attend. Contact the college/university for recommendations concerning appropriate courses.
2. Obtain a current copy of the catalog of that college and study its entrance requirements and general education courses.
3. Confer with a transfer counselor in Student Services and with an academic advisor.
4. Complete a transcript release form in Student Services.

Changes in the student's major field of study or in the choice of a senior institution may result in transfer problems. Such changes should be made only after careful consultation with an advisor and Student Services counselor.

## TRANSFER OF CREDIT WITHIN CLEVELAND COMMUNITY COLLEGE

Credit earned in any institutional degree program may be credited toward another degree or diploma program upon evaluation by the Dean of Enrollment Management. Credits earned in a diploma program are not transferable to an associate degree program but may be

credited toward a second diploma major. If graduation requirements change during the time a student is enrolled, the student may elect to satisfy the requirements in effect at the time of the original enrollment or the new requirements.

Any student who is currently enrolled or has graduated from a curriculum program of the College and wishes to transfer to another curriculum program must follow these procedures:

1. Go to Student Services and update his/her application on file, stating the new curriculum and semester of entrance.
2. Meet the admission requirements for the desired program as stated in the College catalog.

Applicants will receive notification of admission by letter from the Director of Admissions along with an "Evaluation of Transfer Credit" form from Dean of Enrollment Management denoting hours for which credit will be given.

## NORTH CAROLINA COMPREHENSIVE ARTICULATION AGREEMENT

This is a statewide agreement which governs the transfer of credits between North Carolina community colleges and public universities in North Carolina. The agreement provides for a smooth transfer of students. North Carolina community college students who earn an associate's degree according to the Comprehensive Articulation Agreement will be treated as juniors (64 semester hours of credit will transfer) at any of the UNC institutions after being admitted. Brochures describing the agreement are available in Student Services.

## APPALACHIAN STATE UNIVERSITY'S OFF-CAMPUS BACCALAUREATE DEGREE COMPLETION PROGRAM

Appalachian State University is offering to Associate in Arts and Associate in Science graduates the junior and senior years of various bachelor degree programs on the campus of Cleveland Community College. Contact the Vice President of Student Services for more information.

## REGISTRATION

At registration, students will be assigned class schedules, will have ID cards made, will receive parking decals, will pay fees, and will purchase books. Each student is expected to register and begin classes on schedule. A student is not registered and cannot attend classes until tuition and fees are paid in the Business Office. All students must process their registration forms through the Business Office even though their tuition my be free or paid by another source.

# GRADUATION HONORS

To graduate with High Honors a student must earn a GPA of 3.8 - 4.0 in courses presented for graduation. To graduate with Honors a student must earn a GPA of 3.5 - 3.79 in all courses presented for graduation. To qualify for either honor, a student must not have received any grade lower than a C in the program being completed. If a student made a D or F in a course that was later repeated, the student is disqualified from graduating with honors. Developmental course grades are not used in the computation for Honors or High Honors.

# REQUIREMENTS FOR GRADUATION

The following are established as minimum requirements for graduation from curriculum programs.

1. Complete course requirements outlined by the curriculum pursued and earn at least a 2.0 GPA in courses presented for graduation. Students may graduate under the program requirements in effect at the time the student declared the major or under the current program requirements at the time of graduation.
2. Complete 64-65 credit hours for the Associate in Arts, Associate in Science, or Associate in General Education degree, 64-76 credit hours for the Associate in Applied Science degree, 36-48 credit hours for a diploma, and 12-18 credit hours for a certificate. At least 25% of the hours presented for graduation from Associate degree, diploma, or certificate programs must have been earned at Cleveland Community College.
3. Meet with assigned faculty advisor no later than the third (3rd) week of the semester in which graduation requirements are expected to be completed. Complete a graduation application, and submit it to the Registrar. The Registrar will make a complete check of the student's record and either notify the student that everything is in order or notify the student's academic advisor everything is not in order.
4. A graduation fee is to be paid by the student before receiving a degree, diploma, or certificate.
5. Fulfill all financial obligations to the College and secure clearance from the Library.
6. Purchase cap, gown, and invitations in the College store.
7. Complete evaluation forms and attend graduation practice.
8. Be present for graduation exercises. Exceptions to this requirement, in case of unavoidable absences, may only be granted by the Vice President for Student Services.

# STUDENT SERVICES

## STUDENT SERVICES STRATEGIC VISION
## (Statement of Purpose)

Student Services, in partnership with internal and external constituencies, nurtures an environment that responds to student needs and the attainment of their educational goals by providing current, accurate information and quality services.

Broad categories of these services include: entry and exit services, student records, advisement and counseling, financial aid, and student support.

**Goals:**
1. Lead the College in refining the College-wide Enrollment Management Plan with a focus on three major areas: marketing, recruitment, and retention.
2. Continue refinement of entry services to students such as admissions, the student orientation programs, registration, financial aid, and information services.
3. Continue refinement of student support and exit services to students such as student records, student activities, graduations, etc.
4. Provide leadership that promotes systems thinking to ensure a more effective Student Information System.
5. Continue staff development that encompasses current national trends and issues by providing specific training for Student Services team needs and which results in a Student Services identity.
6. Identify and acquire human and fiscal resources to meet student needs.
7. Continuously evaluate College/community partnerships and events to improve and expand services to students and the community.

## GENERAL INFORMATION

Student Services is generally open from 8:00 AM to 8:00 PM Monday through Thursday and from 8:00 AM to 4:00 PM on Fridays. Services are offered to all day and night, part-time and full-time students. A full program of student activities is offered. All students (including those off-campus) are encouraged to participate in all appropriate services.

## STUDENT'S ROLE AND PARTICIPATION IN
## INSTITUTIONAL DECISION-MAKING

All students are members of the Student Government Association. The president of the Student Government Association represents the student body on the Board of Trustees of the College as a non-voting member. The Student Government Association president is encouraged

to offer comments and suggestions to the Board on institutional decision making. The Student Government Association president is also a member of the College Admissions Committee.

Students are also represented on other College committees, organizations, and clubs, such as:

Due Process Committee
Financial Aid Committee
Library Advisory Committee
Student Clubs

## ACADEMIC ADVISING AND COUNSELING

Counselors are available in Student Services to assist all students with educational and vocational problems and concerns. Students are assigned academic advisors to assist in planning academic programs and in developing the course schedule each semester. Students in need of personal counseling will be referred to appropriate agencies.

## ACADEMIC SUPPORT CENTER

The Academic Support Center is provided by the college to help each student successfully complete a program of instruction suited to his or her ability level and career goals. The Center provides services for students in two main areas, making informed career choices, and achieving the skills necessary to meet their academic and career goals. All students, employees, and residents of Cleveland County may find assistance in choosing a suitable career by making an appointment for career testing and guidance to determine interest and aptitude for a variety of careers. The career services are free. All students of the college can receive help in the Academic Support Center by academic placement testing to ensure correct placement in college courses, and by taking pre-curriculum courses to help acquire the skills necessary to enter college level courses. The Center also may provide individual help for students needing additional instructional support. In addition to the services described above, the Center maintains a multi-media computer lab providing alternate delivery methods of testing and instruction.

## JOB PLACEMENT

Cleveland Community College maintains a placement service to help interested students and alumni find employment. Cleveland Community College and the North Carolina Employment Security Commission (Shelby) participate in a cooperative agreement whereby an ESC representative maintains an office in the Academic Support Center. The ESC representative is responsible for helping students find part-time and full-time employment.

## STUDENT HOUSING

The College does not have dormitory accommodations available. Any student who needs to locate housing in Shelby should contact the

local Chamber of Commerce who will provide a list of local realtors, a local map and other newcomer information.

## ORIENTATION

All part-time and full-time new students and families are strongly encouraged to participate in a free orientation program each semester in order to promote adjustment to the educational programs and services of the College.

## ALUMNI ASSOCIATION

Each Cleveland Community College student receiving a degree, diploma or certificate is considered a member of the Alumni Association. The aim of the association is to keep former students informed of and involved in the College's growth, activities, and services. Alumni are encouraged to take advantage of job placement services. The Student Government Association Director is sponsor for the Alumni Association.

## STUDENT HEALTH

The College does not provide medical, hospital, or surgical services nor does the College assume responsibility for injuries incurred by accidents when taking part in intramural sports, class or student activities. Medical services are available at the emergency room of Cleveland Regional Medical Center. A doctor is on duty 24 hours a day in the emergency room. A first-aid kit is available at the visitor reception area. Student Services provides programs on health education to interested students and staff. The College certifies and promotes a drug-free workplace and adheres to a communicable disease policy. Smoking is *not allowed* in any campus building.

## COSMETOLOGY BENEFITS

All Cleveland Community College students, faculty, and staff with current ID's are eligible for discounts in the Cosmetology Department. These discounts may apply to haircuts, color, perms, and nail services.

## STUDENT ACTIVITIES

Cleveland Community College is interested in developing students to their fullest potential. The College strives to offer the utmost in academics as well as social, cultural and physical activities to help build a well-rounded person. Student activities offer every student an opportunity to make new friends and to help the academic community at large. All student activities are assisted and supported by the Student Government Association.

The Snack Bar/Student Lounge is open from 7:00 a.m. - 1:30 p.m. and 2:30 p.m. - 9:00 p.m. Monday - Thursday, and Friday 7:00 a.m. - 2:00 p.m. The Student Government Association and Gamma Beta Phi

offices, and student showers and lockers are located in the Student Activities Center. The gymnasium and athletic fields are available for College courses and organized college events.

A number of clubs have been organized, and faculty and staff serve as advisors. No student will be excluded from membership in an organization because of race, creed, religion, sex, age, color, disability, or national origin. Cultural activities and other special events such as "Spring Fest, Fall Fling, Halloween Contest, Receptions, Intramural Softball Games, Intramural Volleyball and Basketball games" are sponsored periodically by the SGA for the enjoyment of all Cleveland Community College students. Students interested in forming new organizations should consult the SGA President and SGA Advisor for assistance.

The Advisor of the Student Government Association is responsible for supervising the student activities program. Initial requests and plans may come from the student body through the Student Government Association. Every effort is made, within the limited scope of financing and facilities, to conduct a comprehensive program of activities. Clubs and organizations are free to operate their organizations as they choose within the legal framework of college rules, and local and state laws. The SGA budget must be approved by the SGA President and college administration.

## ATHLETICS AND SPORTS

Intramural sports are encouraged and are periodically provided for students by the Student Government Association. These include basketball, softball, volleyball, tennis, and horseshoes. The College *does not* participate in intercollegiate sports.

## STUDENT PUBLICATIONS

Cleveland Community College encourages students to participate in the production of student publications. The College supports the student's right to express himself/herself through journalist endeavors which can contribute to an atmosphere of responsible discussion. Roles of student publications are to allow for student expression regarding the College — its mission, policies, programs, services, faculty, staff, facilities, student activities and events — and to keep students abreast of current events, rules, regulations.

*Cleveland Links* – A student newsletter that is published monthly by the Student Government Association.

## STUDENT GOVERNMENT ASSOCIATION

All students are members of the Student Government Association. The Student Government Association at Cleveland Community

College takes an active part in life at the college. The purpose of this organization is:

1. To represent the individual thinking, the integrity, the ideas, and the interests of the students within Cleveland Community College.
2. To encourage cooperation among students, faculty, and administration.
3. To sponsor activities or endeavors that will be of benefit to the student body and Cleveland Community College.
4. To do all things necessary to promote the welfare of the student body.

Officers of the Cleveland Community College SGA may attend the North Carolina Comprehensive Community College Student Government Association meetings. This enables the students to meet new people and exchange ideas from different colleges for the enhancement of their respective organizations. The SGA Constitution and By-Laws are available in Student Services.

## STUDENT CLUBS

Student clubs may be organized with the approval of the SGA and the Vice President for Student Services. These may be related to the vocational goals of the students or may serve as civic organizations or special interest areas of the students.

**Gamma Beta Phi Honor Society** is a national honor and service organization which emphasizes service, character, and scholarship. Memberships, based on a 3.50 grade point average and completion of 15 semester hours, are extended twice a year.

**Black Awareness Club** promotes knowledge and appreciation of black history.

**Lamplighters** is a club that promotes the high standards and ideals of the nursing profession.

**Mu Epsilon Delta** is comprised of students within the Office Systems Technology-Medical Curriculum. The club's purpose is to broaden the students' awareness and interest in the medical environment by engaging in educational and civic projects.

## SNACK BAR/STUDENT LOUNGE

A variety of hot and cold foods is available in the campus Snack Bar/Student Lounge. Hours of operation are from 7:00 a.m. - 1:30 p.m. and 2:30 p.m. - 9:00 p.m. Monday - Thursday, and Friday 7:00 a.m. - 1:00 p.m.

# STUDENT BEHAVIOR
## *Student Rights and Responsibilities*

The rights of students as citizens are acknowledged and reaffirmed. The College recognizes the right of an enrolled student to receive a full opportunity to learn and develop, unfettered by any and all obstacles not conducive to a sound, fundamental educational program. To this end, the College recognizes, declares, and vests certain rights in each student enrolled at the College.

Students are responsible for reading and understanding the College Academic Bulletin and Student Handbook. Students are responsible for acting as responsible adults, for proper completion of their academic programs, for familiarity with all requirements of the curriculums from which they intend to graduate, for maintaining the grade average required, for knowing their academic standing, and for meeting all other degree requirements. Their advisors will counsel them, but the final responsibility remains with the student. Students are required to keep Student Services up to date on their current addresses, telephone numbers, and name changes.

## Student Code of Conduct and Jurisdiction of Judicial Bodies Disciplinary Responsibilities of College Officials, Disciplinary Procedures, and Appeal

It is expected that students will conduct themselves as responsible adults at all times. The College has an inherent responsibility to maintain order on its campus; therefore, students may be suspended or dismissed by the appropriate Vice President for behavior deemed incompatible with the mission, the regulation or responsibility of the College. Disruptive behavior, destruction of school property, stealing, cheating, plagiarizing, gambling, use of profane language, engaging in personal combat or in lewd behavior, possession of dangerous weapons, or the possession and/or use of alcoholic beverages and/or the use of any drug as defined under the North Carolina Controlled Substance Act. G.S. 90-89 through G.S. 90-94 in or on any part of the Cleveland Community College campus or at any off-campus official student-related activity will not be tolerated. Any violation of these regulations will result in expulsion from the College. In addition, any infraction which is a violation of North Carolina law will be turned over to local authorities. Students who believe their rights have been violated may appeal using Due Process.

# STUDENTS OF THE SEMESTER

Each Fall and Spring semester the faculty selects one outstanding student as the "Student of the Semester" for each academic division. These students receive a certificate, and local newspapers publish their pictures.

## DEAN'S AND PRESIDENT'S LISTS

Students who receive a 4.0 grade point average at the end of either the Fall or Spring semester and are enrolled full-time will be on the President's List for that semester. Students who receive a 3.5 to 3.99 grade point average at the end of the semester and are enrolled full-time will be on the Dean's List for that semester. Developmental course grades are not used in the computation for the Dean's List or President's List.

## WHO'S WHO AMONG STUDENTS IN AMERICAN JUNIOR COLLEGES

Each academic year, the faculty selects students for inclusion in the nationally-recognized program, Who's Who Among Students in American Junior Colleges. These students are selected because of their outstanding performance in academics, extracurricular activities, or community service.

## OUTSTANDING GRADUATE AWARDS

These awards are made to graduating students who have distinguished themselves by being most outstanding in terms of scholastic achievement, performance and maturity of purpose during the program of instruction at the College. Students may be recognized for each degree, diploma, or certificate program.

## ALL-USA COMMUNITY AND JUNIOR COLLEGE ACADEMIC TEAM

Each Fall semester, two students are selected as nominees to the ALL-USA Community and Junior College Team. Students who are selected must be in the second year of a degree program, must excel academically and must be involved in extracurricular or community activities. Phi Theta Kappa, USA Today and the American Association of Community Colleges are co-sponsors of the All-USA Academic Team.

# *FINANCIAL INFORMATION*

## FINANCE/ADMINISTRATIVE SERVICES - Purpose and Goals

Finance/Administrative Services supports and promotes learning through responsible management of financial resources and by providing a safe and healthy environment in which to study and work. Services include institution-wide budget preparation, management, and accountability; expansion and maintenance of facilities, equipment and instructional resources; auxiliary services; campus security; information infrastructure; human resources management; and plant operations.

### Goals:
1. Manage institutional funds efficiently and effectively by refining the planning and budgeting processes.
2. Lead the College in refining the Campus Master Plan with a focus on three major areas: existing facilities renovation, facilities expansion, and instructional equipment.
3. Continue refinement of plant operations, auxiliary services, and campus security.
4. Lead the College in refining the Student Information System so that it promotes systems thinking and easy access to current, accurate information.
5. Continue staff development that encompasses current national trends and issues by providing specific training for Finance/Administrative Services team needs and which results in a Finance/Administrative Services identity.
6. Identify and acquire human and fiscal resources to meet student needs.
7. Strengthen the commitment to quality by leading the College in promoting human resource management policies and practices that maximize the recruitment, development, and retention of highly competent, dedicated employees.

## TUITION

Cleveland Community College operates on the semester system. Each semester is sixteen weeks in length. Students pursuing a program of study are required to register and pay all fees at the beginning of each semester. A student is not registered until tuition and fees are paid in the Business Office. Every effort is made to keep the student's expenses at a minimum. Tuition cost is set by the State Board of Community Colleges and is subject to change.

Current tuition rates for all college transfer, general education, technical or vocational curriculum students are listed below. These charges are subject to change.*

## North Carolina Students:

| | |
|---|---:|
| **14 or more credit hours** | **280.00** |
| **Less than 14 credit hours** | **(per semester hour) 20.00** |

## Out-of-State Students:

| | |
|---|---:|
| **14 or more credit hours** | **2282.00** |
| **Less than 14 credit hours** | **(per semester hour) 163.00** |

*If accident insurance is desired, contact the Division of Business Affairs for up-to-date information.

## TUITION REFUNDS

A refund shall not be made except under the following circumstances:

A. <u>75 percent</u> refund may be made upon request of the student if the student officially withdraws from the class(es) prior to or on the official 10 percent point of the class(es) or the 10 percent point of the semester if the student officially withdraws from the college. <u>At the time the student officially withdraws under this policy, the college shall notify the student of the right to receive the refund. Requests for refunds will not be considered after the 10 percent point.</u>

B. For classes beginning at times other than at the beginning of the semester, the same provisions set fourth in Part (1) (A) of this paragraph apply. For contact hour classes 10 calendar days from the first day of the class(es) is the determination date.

C. A pre-registered curriculum student who officially withdraws from the college prior to the first day of the college's academic semester will be eligible for a 100 percent tuition refund, if requested.

D. A pre-registered student who officially withdraws from a curriculum class prior to the day the class begins will be eligible for a 100 percent tuition refund, if requested.

<u>Reminder:</u> Since a curriculum student is charged hour for hour up to 14 credit hours, a refund would not be applicable unless the credit hours enrolled were reduced to less than 14. This policy is subject to change.

*If accident insurance is desired, contact the Division of Business Affairs for up-to-date information.

## FINANCIAL RESPONSIBILITY

Students are not permitted to default in the payment of fees, fines, loans, or other financial obligations due the College. All tuition, fees, and other expenses must be paid prior to entering class. Any deviation from this policy must be approved by the President of the College.

## RESIDENCE STATUS FOR TUITION PAYMENT

Contact the Director of Admissions regarding the requirements for residence status for tuition payments.

## COLLEGE STORE

A student is required to buy the necessary textbooks and supplies. An average cost of books will vary from $100 to $300 per semester, depending on the curriculum and number of courses taken. Books and supplies are sold during regular college store hours.

## STUDENT INSURANCE

Certain risks are inherent in any work involving regular contact with mechanical and electrical equipment. While stringent precautions will be taken to insure safety, it is felt to be in the best interest of all students to provide some measure of insurance protection.

A group accident policy is available through the Business Office. The cost of the insurance is approximately $10.00 per year. If students are not already covered by accident insurance, we strongly recommend this policy to them. The policy is limited to coverage, both in the time period covered and the amounts provided for each accident. Information concerning the policy and coverage is distributed during each registration period and is also available in the Business Office. It is strongly recommended for all students in physical education classes.

Any accident, regardless of how minor it may be, must be reported to the instructor in the area.

Personal liability insurance (malpractice) is required of all Practical Nursing, Associate Degree Nursing, Radiography, and Phlebotomy students and The cost of coverage is $15.00 per year.

## GRADUATION FEE

Students eligible to graduate from all curriculum programs will be required to pay a graduation fee prior to graduation.

## STUDENT ACTIVITY FEE

All students enrolled for seven or more credit hours are required to pay a student activity fee of $19.00 for each Fall and Spring semesters. Students enrolled for less than seven credit hours will pay a student activity fee of $10.00. These fees are subject to change. The Student Government Association budgets this money yearly with the approval of the Administration. Included in the budgeting are the following items: Fall and Spring festivals, SGA dues and conventions, ID cards, parking decals, and other student related activities. Student Activity Fees are not refundable.

# PARKING (MOTOR VEHICLE AND TRAFFIC REGULATIONS FOR CLEVELAND COMMUNITY COLLEGE)

I. General Information

The control and enforcement of motor vehicle conduct is necessary both for the safety of the individual and the efficient operation of Cleveland Community College.

A. In the following information the term, campus, shall refer to that property operated by Cleveland Community College and those other properties when used by Cleveland for educational purposes.

B. The term, motor vehicle, shall include all vehicles which are covered by the motor vehicle laws of North Carolina.

C. No student with an outstanding traffic infraction may receive a transcript nor register until receiving clearance from the Business Office and paying all fines.

D. Student parking is in the large lot on the fairground side of the campus.

II. Registration of Vehicles

A. All faculty, staff and students, part-time and full-time, shall be required to have their vehicle or vehicles registered by the Business Office and to affix an appropriate decal on the driver's side of the rear window (inside). There shall be no charge to register vehicles.

B. Campus visitors, law enforcement vehicles, and service vehicles are specifically exempted from registering their vehicles. However they are expected to obey all other regulations.

III. Regulations

A. It shall be the responsibility of the Campus Security Committee to recommend traffic regulations to the President of the College for presentation to the Board of Trustees for approval.

B. Enforcement of regulations shall be administered by the Campus Security Committee.

C. Those students assessed fines shall pay those to the Business Office. (For redress, see part IV.)

D. The following shall be considered violations of campus motor vehicle regulations and the corresponding fine:

1. Vehicle showing no registration . . . . . . . . . . . . . . . . .$5.00
2. Parking in improper area . . . . . . . . . . . . . . . . . . . . . .3.00
3. Parking by backing vehicle into area . . . . . . . . . . . . . .1.00
4. Double parking or blocking a legally parked vehicle . . .3.00
5. Speeding in excess of 10 m.p.h. . . . . . . . . . . . . . . . . .3.00
6. Failure to yield right-of-way to pedestrian . . . . . . . . . . .3.00
7. Reckless driving . . . . . . . . . . . . . . . . . . . . . . . . . . . . .5.00

E. This College reserves the right to remove any illegally parked vehicle by a College vehicle, privately owned wrecker, or other means. The violator shall be responsible for any tow charge in addition to the violation fee.

    F.  The registered operator is responsible for the use of the vehicle.
IV.  Redress
    A.  A committee shall be made to exist which will be known as the Campus Security and Traffic Committee.
    B.  It shall be the responsibility of this committee to determine final disposition of fines for which anyone may feel that he/she was unnecessarily charged.
    C.  This committee shall be composed of the following:
        1.  One member of the Campus Security Committee, not the chairman.
        2.  One member of the Campus Safety Committee, not the chairman.
        3.  One member of the Student Government Association, not the president.
V.  The Campus Security Committee shall have power to recommend changes in the above regulations provided the change is properly communicated to the administration, faculty, staff, and students of Cleveland Community College.

## FINANCIAL AID INFORMATION

The fundamental process of the Financial Aid Program at Cleveland Community College is to provide financial assistance, based on financial need, to students who normally could not attend post-secondary school without aid. Financial aid at Cleveland is based on a needs analysis. The needs analysis form used by Cleveland is the Free Application for Federal Student Aid. This form, located in the Financial Aid Office, or on the internet at www.fafsa.ed.gov, must be completed by students applying for financial aid. For aid other than the Pell Grant, additional forms may be required.

In accordance with the Omnibus Drug Initiative Act of 1988, as a precondition to receive federally funded financial aid (e.g., Pell Grant, Campus Based Programs), each student receiving assistance must certify that he or she will not engage in the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance during the period of enrollment covered by a grant. If convicted of a drug related Federal or State offense, the institution must withhold any further Title IV payments to the student until determined by the appropriate authority is made regarding fraud on the part of the student.

- Financial aid at Cleveland Community College consists of scholarships, grants and work study or any combination of these as determined by the Financial Aid Office.
- The student or family of the student has the primary responsibility for post-secondary educational cost. Financial aid awarded by the College is based on the need of the student to supplement the family or student contributions.

- Recipients of financial aid who withdraw from the College must personally notify the Financial Aid Office of this action. Also, any changes in name, marital status, address, academic program, or enrollment status must be reported to the Financial Aid Office.
- The primary purpose of financial aid is to assist the student in receiving an education. To be assured of continued financial aid, students must maintain "satisfactory progress" in accordance with the College's grading policy, listed in the catalog under "Academic Progress".
- Any commitment of federal funds (Pell Grant, SEOG, CWS, NCSIG) is tentative and contingent upon subsequent Congressional appropriation and actual receipt of funds by the College.
- The Financial Aid Office reserves the right, on behalf of the College, to review and adjust or cancel an award any time there is indication of changes in financial status, academic program, good academic standing, or failure to observe reasonable standards of conduct.
- Recipients of financial aid from the College are to notify the Financial Aid Office of any other financial aid extended to them from sources outside the College prior to acceptance of outside aid.
- Most awards are based on **full-time attendance**. Some funds may be paid for 1/2 or 3/4 time but may be reduced proportionately. **College Transfer and Technical students** are required 12 or more credit hours for full-time status; 3/4 time is 9 to 11 credit hours, and 1/2 time is 6 to 8 credit hours. No awards are made for less than 1/2 time. **Vocational classes are subject to Title IV credit hour conversion which means, attendance is based on contact hours instead of credit hours**: Full-time is 23 or more contact hours, 3/4 time is 17-22 contact hours, and 1/2 time is 12 - 16 contact hours.

## FINANCIAL AID APPLICATION PROCESS

There are several ways to apply for financial aid at Cleveland Community College. The Free Application for Student Aid (FAFSA) can be obtained through the Internet. The web address is www.fafsa.ed.gov. From the web site a student just follows the simple instructions to apply for financial aid electronically. The FAFSA can also be obtained by picking up a paper application in the Financial Aid Office or in Student Services. This paper application can be completed and mailed from the student's home or it can be filed electronically by the Financial Aid staff at Cleveland. All students shall apply for the Pell Grant if they wish to be considered for other federal, state, or institutional financial aid that is based on need. Students are encouraged to complete the application process as soon as income taxes and reports are filed or the source of income has been verified. In addition to verification of income, whether taxable or non-taxable, students will be requested to verify or document

federal income taxes paid, number in household, number attending post-secondary institutions. Students should submit the Student Aid application on or before the first of July to insure completion of the application process prior to Fall Semester. Students completing the Student Aid application on the day of registration are not awarded their grant until the application process is complete.

## SATISFACTORY PROGRESS STANDARDS
## FOR FINANCIAL AID

### Introduction
The Higher Education Act of 1965, as amended by Congress in 1980, mandates institutions of higher education to establish minimum standards of **"Satisfactory Progress"** for students receiving financial aid. For the purpose of maintaining a consistent policy for all students receiving financial aid administered by the College's Financial Aid Office, these standards are applicable to all financial aid programs including all Federally sponsored Title IV programs. These standards may be amended to comply with federal regulations, Institution, and program requirements as applicable.

### Satisfactory Progress Defined
To initially receive or continue to receive financial aid, a student must demonstrate BOTH A QUALITATIVE AND QUANTITATIVE STANDARD OF satisfactory progress as defined below:

1. Satisfactory progress for Financial Aid at Cleveland Community College is defined as any student in good academic standing, not on academic probation, and who has a G.P.A. at or above the required standards as established by the college catalog. (Qualitative)

2. Continuing students applying for financial assistance (Title IV funds) which include (PELL GRANT, SUPPLEMENTAL EDUCATION OPPORTUNITY GRANT, COLLEGE WORK STUDY AND STATE STUDENT INCENTIVE GRANT) will be evaluated each semester to determine, by the Standards of Satisfactory Progress, whether the student has successfully completed the minimum percentage of work toward his/her objective, degree, or certificate. Other students entered during the same academic year mentioned above will be evaluated by the FAO the entering semester. (Quantitative)

3. The maximum time frame a full-time student would have to complete his/her course should be 150% of normal required time:

    3 years or 6 semesters for technical and general education programs and transfer programs; 1-1/2 years or 3 semesters for vocational programs.

A half-time or three-quarter time student must satisfactorily complete the appropriate fractional hours of the maximum time frame established for completion of his/her course work.

Students who CHANGE FROM ONE CURRICULUM PROGRAM TO ANOTHER are subject to the maximum time frame mentioned in the above paragraph.

4. Students registered under the Special Credit Programs are NOT ELIGIBLE FOR THE TITLE IV PROGRAM.

If a curriculum student is placed on academic probation or suspension for the first time and applies for admission as a "new" student in another program, the financial aid award is terminated. The student may reestablish eligibility for the federal student aid funds after attending one or more semesters on his/her own and removing the academic probation/suspicion.

Re-entry status is determined by internal evaluation and transfer of credits. After the re-entry semester, the first definition of satisfactory progress applies.

## TYPES OF FINANCIAL ASSISTANCE

All Financial Aid programs fall into one of two categories: grants or employment. Grants and scholarships are outright gifts of money and do not have to be repaid. Employment allows the student to work and earn needed money.

Application procedures and eligibility requirements, as stated in the academic bulletin, apply for any program. Students having a four-year degree may apply for any program except Pell Grant and SEOG.

## GRANTS

**Pell Grant**

All financial aid applicants are required to apply for the Pell Grant. The Pell Grant is a federal student aid entitlement program which provides a foundation of financial assistance to which other forms of aid may be added.

The U.S. Department of Education determines the student's eligibility for financial aid based on formula developed annually and reviewed by Congress. This formula is applied consistently to all applicants and takes into account income, assets, family size, etc. The formula uses the information provided on the application to produce an eligibility index number which determines the amount of aid to be received. The Student Aid Report (SAR) will be mailed directly to the student approximately four to six weeks after submitting the written application. The ISIR (Institutional Student Information Record) will be received by Cleveland approximately five to ten days after submission of the electronic application.

**Supplemental Education Opportunity Grant (SEOG)**

SEOG is also a federal program. However, it is not an entitlement program as is the Pell Grant. Recipients are determined by the Director of Financial Aid who awards the grant according to the exceptional financial need of the student

**North Carolina Student Incentive Grant (NCSIG)**

These grants are available to legal North Carolina residents who are full-time students in good standing with Cleveland Community College and who have demonstrated need. Amounts are determined by the student's financial need in relation to available resources and the cost of education. Grants may range up to $2000 per academic year but may not exceed one-half the cost of unmet need. Repayment is not required.

**Job Training Partnership Act (JTPA)**

JTPA is a federally funded, skill development program for economically disadvantaged students. Application and recipient selection is processed through the Isothermal Planning Commission.

## EMPLOYMENT

**College Work-Study Program (CWS)**

A work-study program is awarded to students (enrolled at least half-time) demonstrating an unmet need beyond Pell Grant. This program allows students to earn a portion of the cost of their education. Work-study participants will work a supervised schedule, usually 10-15 hours per week. Job descriptions outline the responsibilities of the assigned work-study.

## CLEVELAND COMMUNITY COLLEGE FOUNDATION

Established in 1983, the **Cleveland Community College Foundation's** fundamental, long term goal is to build a strong endowment program to ensure quality education and financial stability for the College. The Foundation is committed to fulfilling several specific objectives including the following:

Increasing the number and diversity of scholarship offerings.

Securing financial support for the technical needs of the College.

Providing support for development of programs and services.

The Foundation is governed by a volunteer Board of Directors comprised of the Chairman of the Trustees of the College, the President of the College, and local community and business leaders. The Chief Development Officer of the College serves as the Executive Director of the Foundation.

A comprehensive annual fundraising campaign is conducted by the Foundation to benefit Cleveland Community College. The Annual Campaign receives support from friends of the College, corporations

and businesses, private foundations, alumni, and College faculty and staff. The **Cleveland Community College Foundation** is a 501(c)(3) non profit corporation. All contributions to the Foundation are tax deductible as provided by law.

## CLEVELAND COMMUNITY COLLEGE FOUNDATION SCHOLARSHIPS

Scholarships offered through the Foundation are classified as endowed and annual. Only the interest earned on endowed gifts may be used by the College. Annual scholarships are awarded from contributions to the annual scholarship fund. Applications for Foundation scholarships are available through the guidance counselors' office of the four area high schools, and the Financial Aid Office of the College. **Applications must be submitted to the Financial Aid Office by April 1.**

**Criteria for Foundation scholarship consideration**: Foundation scholarships are open to all qualified residents of Cleveland County. Scholarship recipients are expected to be full time students with financial need and/or academic promise. Selection is determined by the Scholarship Committee of the College based on applicants good citizenship, interest, ability to succeed at the College level, and if appropriate, demonstrated a need for financial support. Students wishing more information about scholarships should contact the Financial Aid Office.

### Foundation Endowed Scholarships

The **Ruth B. Anthony Memorial Scholarship** provides an annual scholarship for an Office Systems Technology curriculum applicant. It is a fully endowed scholarship established by her employer, Fields Young, Jr. of Shelby, to honor her years of dedicated service.

The **John and Sally Barker Scholarship** provides an annual scholarship for a student enrolled in any curriculum program. It was established by the Cleveland Community College Foundation Board of Directors to recognize their contribution to the community.

The **Cleveland Community College Tech Prep Scholarship** is awarded annually to a student enrolled in the tech prep program. It is a fully endowed scholarship established by business, industry, and citizens of Cleveland County.

The **John L. And Margaret S. Fraley Scholarship** is awarded annually to two students, one from the business curriculum and the second in the tech prep program. This is a fully endowed scholarship established by the Fraley Family of Cherryville to support education in the community.

The **Sam P. Goforth Memorial Scholarship** provides an annual two-year scholarship for a student enrolled in any curriculum program. It is a fully endowed scholarship established by the Goforth Family to support education in the community.

The **Dr. Stan Hardin Memorial Scholarship** provides an annual scholarship for a student enrolled in any curriculum program. As a Doctor of Chiropractic and a multi-talented professional, Dr. Hardin entertained audiences throughout the southeast USA with his music, song, and humor.

The **Dr. William Simpson Memorial Scholarship** provides an annual scholarship for a student enrolled in either the Practical Nursing or the Associate Degree Nursing Program. It is a fully endowed scholarship established by his wife, Mrs. Barbara Simpson of Shelby, in his memory.

The **Joe Whisnant Memorial Scholarship** provides an annual scholarship for a student enrolled in any curriculum. It is a fully endowed scholarship established by his wife, Mrs. Lou Alice Whisnant, of Shelby, in his memory.

## Pooled Income Scholarship Fund

The Pooled Income Scholarships are awarded from the partially funded endowed scholarships named in honor of Dr. James B. Petty, and in memory of Clyde C. Cash, Colonel Pat Hamner, Robert Hoover, and Violet Thomas. The newest Foundation Scholarship was established by College President, Dr. L. Steve Thornburg and his wife, Margaret (Peg), in honor of their parents.

## Annual Scholarship Awards

The **Anonymous Burns Scholarship** will be awarded to a graduate of Burns High School enrolled full-time in any curriculum program. It is an annual award given by an anonymous donor established to support education in the community.

The **Anonymous Fireman Scholarship** is awarded to a student enrolled full-time in any curriculum program of the College and is the relative of a fireman. It is an annual award given by an anonymous donor established to support education in the community.

The **Cleveland Community College Student Government Association Scholarships** (4) are awarded to one graduate each, from Burns, Crest, Kings Mountain, and Shelby High Schools enrolled in any curriculum program of the College. These are annual scholarships established by the Student Government Association to support education in the community.

The **Cleveland County Fair Association/Reithoffer Shows** is awarded to a graduate for Burns, Crest, Kings Mountain, and Shelby High Schools enrolled in any curriculum program of the College. This is an annual scholarship established by the Cleveland county Fair Association/Reithoffer Shows to support education in the community.

The **Dr. John Reynolds Scholarship** is awarded annually to a student enrolled in any curriculum program of the College. It is an annual scholarship established by Dr. John Reynolds of Shelby to support education in the community.

The **Patsy Ruth Mauney Memorial Scholarship** is given annually to two students enrolled in any curriculum program of the College. These are annual scholarships established by Malcolm Parker of Cherryville in memory of his mother to support education in the community.

The **Time Warner Cable of Shelby Scholarship** is awarded annually to a student enrolled in the Broadcasting Technology Program of the College. This is an annual scholarship established by Time Warner Cable of Shelby to support education in the community.

## Other Scholarships

**Gamma Beta Phi Scholarship** — Gamma Beta Phi Honor Society offers a scholarship of one hundred dollars per semester to a worthy student.

**NC Community College Scholarship Program** — To qualify as a candidate for these scholarships, a student would have to meet the established criteria. A copy of the eligibility criteria is available in the Financial Aid Office.

**The Wachovia Technical Scholarship** is awarded annually to a student who is enrolled full-time in the second year of a technical curriculum.

**The Southern Bell Scholarship** is awarded annually to two NC resident students who are enrolled full-time in a course of study leading to a degree or diploma. The recipient must maintain academic progress and continue enrollment at Cleveland Community College. Financial need receives top priority.

**Vocational Rehabilitation** — Students with mental, physical or emotional handicaps which limit employment opportunities may be eligible. For information, students should contact the nearest Vocational Rehabilitation Services, Shelby, NC 28150.

**The North Carolina Nurse Scholarship Loan Program (NESLP)** — the North Carolina Nurse Scholarship Loan Program was established by the General Assembly in 1989 to provide need-based scholarship loans. NESLP awards are available for North Carolina residents enrolled in the Practical Nursing or the Associate Degree Nursing programs. Recipients agree to work for one year as a full-time nurse in North Carolina for each year of NESLP funding.

## Veterans, National Guard and Reserve Programs

**N.C. National Guard Tuition Assistance Programs (NCNG)** — Tuition assistance is available for members of the North Carolina National Guard. Applications are available at guard units and the Office of the Adjutant General, P.O. Drawer 2628, Raleigh, NC 27611.

**Veteran Benefits** — Cleveland Community College is approved to certify eligibility for veterans and for wives, widows and children of disabled or deceased veterans. Applications may be obtained at the Cleveland Community College Veteran's Office or the nearest county Veterans Office.

**Veterans and War Orphans Grant** — These grants are available to immediate family members of deceased or disabled veterans (service connected). Families of POW's and MIA's classified as such for ninety days are eligible. Students should contact: Division of Veterans Affairs, P.O. Box 26206, Raleigh, NC 27611.

**North Carolina Reservist Benefits** — Tuition and benefits may be obtained through the Reserve.

## Veterans Affairs

The Department of Veterans Affairs provides information and assistance to eligible veterans and dependents of disabled or deceased veterans in applying for educational benefits.

To be eligible for educational benefits, the student must be enrolled in an approved curriculum, taking only those courses required for graduation in the chosen curriculum. Students must, in the judgment of the College, maintain satisfactory progress for continued eligibility.

Veterans and eligible dependents must report without delay such information on enrollment, entrance, reentrance, change in the hours of credit or attendance, pursuit, interruption and termination of attendance of an approved course. Notification of any change in status must be reported by the student to the DVA college representative, in time for the DVA to receive it within 30 days of the date on which the change occurs.

DVA regulations governing institution-approved training of veterans and/or dependents of veterans require that certain documents be on file prior to certification of enrollment:

1. Application for admission;
2. Proper application for DVA benefits (Forms 22-1990, 22-5490, or 28-1990);
3. High school transcript or GED scores and transcript of academic record for each college previously attended;
4. If no DVA benefits have been received for prior training;
   a. DD-214
   b. marriage certificate (if applicable)
   c. divorce decree (if applicable)
   d. dependent children's birth certificates (if applicable)
5. If DVA benefits have been received for prior training, the student submits a change of program form (22-1995).
6. Students may be required to provide written verification of class attendance.

The DVA will not approve for enrollment any of the following: (1) course audits (2) repeated courses previously passed (3) courses not required in chosen curriculum (4) work experience (5) more than two course substitutions per curriculum.

Cleveland Community College will not approve for DVA enrollment any of the following: (1) independent study (2) telecourses.

# CURRICULUM PROGRAMS AND ARTICULATION PRE-MAJORS

## CLEVELAND COMMUNITY COLLEGE ACADEMIC PROGRAMS
### Strategic Vision (Statement of Purpose)

Academic Programs prepares students for successful employment and meaningful living in an increasingly technological and culturally diverse society by providing student-centered programs of study and support services. Programs of study include college transfer associate in arts and associate in science degrees; associate in applied science degrees; associate in general education degree; technical and vocational diplomas and certificates. Support services include academic advisement, developmental support, library/media services, and instructional technology.

The Academic Programs Unit also prepares graduates for life-long learning and active participation in a global economy by providing a comprehensive core of general education enabling students to: **express themselves clearly and correctly in speech and writing; read and analyze relevant literature; employ various modes of inquiry; think critically and analytically; demonstrate mathematical competency; and demonstrate computer literacy.**

In addition, the Unit promotes and participates in active partnerships with business and industry; school districts; colleges and universities; community organizations; and other entities in keeping with the College Mission.

### Goals:

1. Lead faculty in refining the Academic Programs Plan with its emphasis on continuous evaluation of: program effectiveness, instructional delivery, student progress, academic advisement, the Academic Support Center, and the College Library and media resources.
2. Lead the College in continuous refinement of the campus-wide Instructional/Information Technology Plan.
3. Lead the institution in establishing the Cleveland Community College Center for Excellence in Teaching and Learning.
4. Provide leadership that promotes systems thinking to ensure a more effective Student Information System.
5. Continue staff development programs which encompass current national trends and issues which impact student learning.
6. Identify and acquire human and fiscal resources to meet student needs.
7. Continuously evaluate College/community partnerships in order to improve and expand services to students and the community.

**The UNC System and Community College System have identified the following specific articulation pre-majors:**

### ASSOCIATE IN ARTS DEGREE
Pre-Art Education (AA)
Pre-Business Administration (AA)
Pre-Business Education and
    Marketing Education (AA)
Pre-College Transfer Nursing (AA)
Pre-Elementary Education, Middle
    Grades Education, and Special
    Education (AA)
Pre-English (AA)
Pre-English Education (AA)
Pre-Health Education (AA)
Pre-History (AA)
Pre-Physical Education (AA)
Pre-Political Science (AA)
Pre-Psychology (AA)
Pre-Social Science: Secondary
    Education (AA)
Pre-Sociology (AA)
Pre-Technology Education (AA)

### ASSOCIATE IN SCIENCE DEGREE
Pre-Biology and Biology Education (AS)
Pre-Engineering (AS)

## TECHNICAL AND GENERAL PROGRAMS

### ASSOCIATE IN GENERAL EDUCATION DEGREE

### ASSOCIATE IN APPLIED SCIENCE DEGREE
Accounting (AAS)
Associate Degree Nursing (RN) (AAS)
Broadcasting and Production Technology (AAS)
Business Administration (AAS)
Business Administration - Marketing and Retailing (AAS)
Criminal Justice Technology (AAS)
Early Childhood Associate (AAS)
    Professional Business and Management Option (AAS)
    Professional Fundamentals Option (AAS)
Electronics Engineering Technology (AAS)
Fire Protection Technology (AAS)
General Occupational Technology (AAS)
Industrial Management Technology (AAS)
Information Systems (AAS)
Mechanical Drafting Technology (AAS) - Proposed Fall 1999
Networking Technology (AAS)
Office Systems Technology (AAS)
Office Systems Technology - Medical (AAS)
Radiography (AAS)

## ONE-YEAR DIPLOMA PROGRAMS

Air Conditioning, Heating and Refrigeration Technology
Auto Body Repair
Broadcasting and Production Technology
Carpentry
Cosmetology
Electrical/Electronics Technology
Industrial Maintenance Technology
Machining Technology
Mechanical Drafting Technology
Plumbing
Practical Nursing
Surgical Technology - Proposed Fall 1999
Welding Technology

## CERTIFICATE PROGRAMS

Advanced Leadership
Air Conditioning, Heating and Refrigeration
Auto Body Repair
Basic Electronics
Basic Law Enforcement Training
Broadcasting and Production
Business Presentation
Carpentry
Crime Scene Investigator - Proposed Fall 1999
Database Management
Digital Electronics
Electrical
Industry Firesafety Specialist - Proposed Fall 1999
Internet Administration
Mechanical Drafting
Network Administration
Plumbing
Real Estate
Spreadsheet Management
Technical Support
Welding

(The College reserves the right to cancel any class or curriculum, day or night, for which there is insufficient enrollment.)

# COLLEGE TRANSFER PROGRAMS

## Associate in Arts
## Associate in Science

Cleveland Community College offers students the opportunity to complete the first two years of various four-year college or university general education requirements. For example, students interested in the areas of study listed below can spend their first two years at Cleveland Community College qualifying for an associate degree and transfer to a four-year institution with junior class standing. A partial listing of areas of study whose prerequisites and/or lower division requirements may be met, in part or in full, at Cleveland Community College follows:

**BUSINESS**
Accounting
Business Administration
Business Education
Computer Science

**EDUCATION** (Teaching)
Elementary
Secondary
Industrial Arts
Middle Grades
Physical Education
Recreation
Health
Special Education

**ENGINEERING**
Aerospace
Construction
Industrial
Chemical
Civil
Electrical
Electronics
Environmental
Mechanical
Nuclear

**ENGLISH**
English
Journalism

**HUMANITIES**
Art
Liberal Arts
Religion
Philosophy

**MATHEMATICS**
Mathematics
Computer Science
Statistics

**MEDICAL RELATED**
Dentistry
Medicine
Medical Technology
Nursing
Optometry
Occupational Therapy
Physical Therapy
Pharmacy
Veterinary Medicine

**NATURAL SCIENCE**
Agriculture
Biology
Biochemistry
Chemistry
Conservation and Ecology
Forestry
Microbiology
Physical Science
Physics
Textiles

**SOCIAL STUDIES**
Economics
History
Law
Psychology
Social Work
Sociology

# DEVELOPMENTAL COURSES

Developmental courses may be required for degree-seeking students. See admission requirements.

Developmental courses are designed to provide instruction in the basic skills so that the student will be successful in regular, collegiate-level courses. These courses earn credit hours for the semester in which they are taken but do not count toward graduation. Grades for developmental courses are "satisfactory" (S) or "unsatisfactory" (U) grades. These grades are not computed with other courses except that they must be passed with a grade of (S) before students can enroll in higher level English, reading, and mathematics courses.

| | | | HOURS | | |
|---|---|---|---|---|---|
| | | | CLASS | LAB | CREDIT |
| ENG | 80 | Writing Foundations | 3 | 2 | 4 |
| ENG | 90 | Composition Strategies | 3 | 0 | 3 |
| ENG | 90A | Composition Strategies Lab | 0 | 2 | 1 |
| MAT | 60 | Essential Mathematics | 3 | 2 | 4 |
| MAT | 70 | Introductory Algebra | 3 | 2 | 4 |
| MAT | 80 | Intermediate Algebra | 3 | 2 | 4 |
| RED | 80 | Intro to College Reading | 3 | 2 | 4 |
| RED | 90 | Improved College Reading | 3 | 2 | 4 |

# COLLEGE TRANSFER PROGRAMS

A large number of students plan their programs for transfer to four-year colleges or universities. Students enroll in what is usually referred to as the transfer curriculum which offers courses that parallel those offered during the first two years at a four-year institution. Most credits earned in this curriculum may be transferred to colleges and universities as the first and second years of a baccalaureate degree program.

Cleveland Community College's transfer program includes many courses designed to prepare students for upper division study in such fields as business, education, engineering, dentistry, law, and medicine. A specially designed general transfer sequence of courses (Pre-Liberal Arts or Pre-Science) is also available for students who have not yet decided upon a major but who intend to transfer their credits to a four-year institution.

Students who plan to transfer to a four-year college or university are advised to give careful attention to the following:

1. The transferability of courses taken at Cleveland Community College is determined solely by the institution to which the student transfers. Curricula and courses have been developed to facilitate transfer of credits. However, some academic departments in four-year institutions have specific requirements which warrant special attention.
2. Students are responsible for meeting the entrance requirements of the institution to which they plan to transfer. Students should work with their faculty advisors to ensure that the courses meet the requirements of the four-year program that they wish to enter.
3. Completion time for college transfer studies should be no longer than four semesters.
4. Because of schedules and personal situations, night students may need longer periods than two years to complete their studies.

Students enrolled in the college transfer program will earn the Associate in Arts or Associate in Science degree after completing the prescribed hours of study.

Upon completion of liberal arts programs, the student should:

1. Write and speak with clarity and precision, in keeping with the rules of standard English.
2. Read and interpret literature critically and analytically.
3. Write critically and analytically in response to literary themes and ideas.
4. Understand the relationship between the history of western civilization and one's culture.
5. Understand the meaning of the "multicultural" approach to history.
6. Understand sociological principles and concepts.
7. Understand one's culture, the cultures of others, and their influences on individual and group behavior.

8. Understand major psychological theories and their effects on individual and group behavior.
9. Understand mathematical and scientific principles and concepts.
10. Use logical reasoning to solve mathematical and scientific problems.
11. Understand, appreciate, and enjoy physical activity and its role in enhancing the quality of one's life.

# ASSOCIATE IN ARTS

## I. General Education (44 Semester-Hour Core)

|  |  | | HOURS | |
|  |  | CLASS | LAB | CREDIT |
|---|---|---|---|---|
| **A. Composition** | | | | |
| ENG 111 | Expository Writing | 3 | 0 | 3 |
| ENG 113 | Literature-Based Research | 3 | 0 | 3 |
| **B. Humanities/Fine Arts** | | | | |
| COM 231 | Public Speaking | 3 | 0 | 3 |

**Select two courses from the following:**

| ART 111 | Art Appreciation | 3 | 0 | 3 |
|---|---|---|---|---|
| DRA 111 | Theatre Appreciation | 3 | 0 | 3 |
| MUS 110 | Music Appreciation | 3 | 0 | 3 |

Foreign language lecture and lab are considered one course.

| SPA 111 | Elementary Spanish I | 3 | 0 | 3 |
|---|---|---|---|---|
| SPA 181 | Spanish Lab I | 0 | 2 | 1 |
| SPA 112 | Elementary Spanish II | 3 | 0 | 3 |
| SPA 182 | Spanish Lab II | 0 | 2 | 1 |
| SPA 211 | Intermediate Spanish I | 3 | 0 | 3 |
| SPA 281 | Spanish Lab III | 0 | 2 | 1 |
| SPA 212 | Intermediate Spanish II | 3 | 0 | 3 |
| SPA 282 | Spanish Lab IV | 0 | 2 | 1 |
| PHI 210 | History of Philosophy | 3 | 0 | 3 |
| REL 110 | World Religions | 3 | 0 | 3 |
| REL 221 | Religion in America | 3 | 0 | 3 |
| REL 211 | Intro to Old Testament | 3 | 0 | 3 |
| REL 212 | Intro to New Testament | 3 | 0 | 3 |
| REL 111 | Eastern Religions | 3 | 0 | 3 |
| REL 112 | Western Religions | 3 | 0 | 3 |

**Select at least 3 hours from the following:**

| ENG 231 | American Literature I | 3 | 0 | 3 |
|---|---|---|---|---|
| ENG 232 | American Literature II | 3 | 0 | 3 |
| ENG 233 | Major American Writers | 3 | 0 | 3 |
| ENG 241 | British Literature I | 3 | 0 | 3 |
| ENG 242 | British Literature II | 3 | 0 | 3 |
| ENG 251 | Western World Literature I | 3 | 0 | 3 |
| ENG 252 | Western World Literature II | 3 | 0 | 3 |
| ENG 261 | World Literature I | 3 | 0 | 3 |
| ENG 262 | World Literature II | 3 | 0 | 3 |

|  |  |  |  | **HOURS** | | |
|---|---|---|---|---|---|---|
|  |  |  |  | **CLASS** | **LAB** | **CREDIT** |

**C. Social Sciences**

**Select two courses from the following:**

| HIS | 111 | World Civilizations I | 3 | 0 | 3 |
|---|---|---|---|---|---|
| HIS | 112 | World Civilizations II | 3 | 0 | 3 |
| HIS | 131 | American History I | 3 | 0 | 3 |
| HIS | 132 | American History II | 3 | 0 | 3 |

**Select two courses from the following:**

| PSY | 150 | General Psychology | 3 | 0 | 3 |
|---|---|---|---|---|---|
| SOC | 210 | Introduction to Sociology | 3 | 0 | 3 |
| GEO | 111 | World Regional Geography | 3 | 0 | 3 |
| POL | 120 | American Government | 3 | 0 | 3 |

**D. Natural Sciences**

**Select one of the following sequences:**

| BIO | 111 | General Biology I | 3 | 3 | 4 |
|---|---|---|---|---|---|
| BIO | 112 | General Biology II | 3 | 3 | 4 |
| CHM | 151 | General Chemistry I | 3 | 3 | 4 |
| CHM | 152 | General Chemistry II | 3 | 3 | 4 |
| PHY | 151 | College Physics I | 3 | 2 | 4 |
| PHY | 152 | College Physics II | 3 | 2 | 4 |
| GEL | 111 | Introductory Geology | 3 | 2 | 4 |
| GEL | 120 | Physical Geology | 3 | 2 | 4 |

**E. Mathematics/Computer Science**

| MAT | 161 | College Algebra | 3 | 0 | 3 |
|---|---|---|---|---|---|
| CIS | 110 | Introduction to Computers | 3 | 0 | 3 |

Note: ACA 115, Success and Study Skills, 0-2-1, should be completed as early as possible.

**II. Select 20 hours from the following:**

ACC 120; ACC 121; ART 111; ART 113; ART 114; ART 115; ART 116; ART 121; ART 122; ART 130; ART 131; ART 140; ART 212; ART 213; ART 132; ART 231; ART 240; ART 241; ART 288; BIO 120; BIO 130; BUS 110; CHM 151; CHM 152; CSC 134; DRA 124; DRA 128; DRA 111; ECO 251; EC0 252; EDU 116; ENG 125; ENG 126; ENG 131; ENG 231; ENG 232; ENG 233; ENG 241; ENG 242; ENG 251; ENG 252; ENG 261; ENG 262; ENG 272; GEO 111; HEA 110; HEA 111; HEA 120; HIS 111; HIS 112; HIS 131; HIS 132; HIS 228; HIS 229; HUM 120; HUM 122; HUM 170; HUM 211; MAT 140; MAT 141;

MAT 142; MAT 151; MAT 151A; MAT 162; MAT 171; MAT 172; MAT 175; MAT 271; MAT 272; MUS 110; PED 110; PED 111; PED 112; PED 113; PED 114; PED 115; PED 116; PED 117; PED 118; PED 119; PED 125; PED 126; PED 128; PED 129; PED 130; PED 131; PED 141; PED 142; PED 143; PED 144; PED 145; PED 146; PED 147; PED 148; PED 150; PED 151; PED 170; PED 171; PED 172; PED 173; PED 174; PED 240; PED 250; PED 251; PED 252; PED 254; PED 255; PED 256; PHI 210; PHI 240; PHY 131; PHY 151; PHY 152; PHY 251; PHY 252; POL 120; POL 220; PSY 150; PSY 239; PSY 241; PSY 243; PSY 281; SOC 210; SOC 213; SOC 220; SOC 225; SPA 111; SPA 181; SPA 112; SPA 182; SPA 211; SPA 281; SPA 212; SPA 282

## III. Physical Education

**Select one hour from the following courses:**

PED 110; PED 111; PED 112; PED 113; PED 114; PED 115; PED 116; PED 117; PED 118; PED 119; PED 125; PED 126; PED 128; PED 129; PED 130; PED 131; PED 141; PED 142; PED 143; PED 144; PED 145; PED 146; PED 147; PED 148; PED 150; PED 151; PED 170; PED 171; PED 172; PED 173; PED 174; PED 240; PED 250; PED 251; PED 252; PED 254; PED 255; PED 256

**Courses counted as core courses may not be counted again as elective hours.**

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 64-65**

**Students must meet the receiving university's foreign language and physical education requirement, if applicable, before or after transfer to the four-year institution.**

# PRE-ART EDUCATION (AA)

## I. General Education (44 Semester-Hour Core)

|  |  | HOURS | | |
|---|---|---|---|---|
|  |  | CLASS | LAB | CREDIT |

### A. Composition
| | | CLASS | LAB | CREDIT |
|---|---|---|---|---|
| ENG 111 | Expository Writing | 3 | 0 | 3 |
| ENG 113 | Literature-Based Research | 3 | 0 | 3 |

### B. Humanities/Fine Arts
| | | CLASS | LAB | CREDIT |
|---|---|---|---|---|
| COM 231 | Public Speaking | 3 | 0 | 3 |
| ART 111 | Art Appreciation | 3 | 0 | 3 |
| MUS 110 | Music Appreciation | 3 | 0 | 3 |

**Select one of the following courses:**
| | | CLASS | LAB | CREDIT |
|---|---|---|---|---|
| ENG 231 | American Literature I | 3 | 0 | 3 |
| ENG 232 | American Literature II | 3 | 0 | 3 |
| ENG 233 | Major American Writers | 3 | 0 | 3 |
| ENG 241 | British Literature I | 3 | 0 | 3 |
| ENG 242 | British Literature II | 3 | 0 | 3 |
| ENG 251 | Western World Literature I | 3 | 0 | 3 |
| ENG 252 | Western World Literature II | 3 | 0 | 3 |
| ENG 261 | World Literature I | 3 | 0 | 3 |
| ENG 262 | World Literature II | 3 | 0 | 3 |

### C. Social Sciences
| | | CLASS | LAB | CREDIT |
|---|---|---|---|---|
| HIS 111 | World Civilizations I | 3 | 0 | 3 |
| HIS 112 | World Civilizations II | 3 | 0 | 3 |
| PSY 150 | General Psychology | 3 | 0 | 3 |
| SOC 210 | Introduction to Sociology | 3 | 0 | 3 |

### D. Natural Sciences

**Select one of the following sequences:**
| | | CLASS | LAB | CREDIT |
|---|---|---|---|---|
| BIO 111 | General Biology I | 3 | 3 | 4 |
| BIO 112 | General Biology II | 3 | 3 | 4 |
| CHM 151 | General Chemistry I | 3 | 3 | 4 |
| CHM 152 | General Chemistry II | 3 | 3 | 4 |
| PHY 151 | General Physics I | 3 | 2 | 4 |
| PHY 152 | General Physics II | 3 | 2 | 4 |
| GEL 111 | Introductory Geology | 3 | 2 | 4 |
| GEL 120 | Physical Geology | 3 | 2 | 4 |

### E. Mathematics and Computer Science
| | | CLASS | LAB | CREDIT |
|---|---|---|---|---|
| MAT 161 | College Algebra | 3 | 0 | 3 |
| CIS 110 | Introduction to Computers | 2 | 2 | 3 |

## II. Major Courses
| | | CLASS | LAB | CREDIT |
|---|---|---|---|---|
| ART 121 | Design I | 1 | 4 | 3 |
| ART 122 | Design II | 1 | 4 | 3 |

| | | | HOURS | | |
|---|---|---|---|---|---|
| | | | **CLASS** | **LAB** | **CREDIT** |
| ART | 131 | Drawing I | 0 | 6 | 3 |
| ART | 132 | Drawing II | 0 | 6 | 3 |
| ART | 114 | Art History Survey I | 3 | 0 | 3 |
| ART | 115 | Art History Survey II | 3 | 0 | 3 |

Note: ACA 115, Success and Study Skills 0-2-1, required in all two-year programs, should be completed early in this program.

## III. Physical Education

**Select two of the following courses:**

PED 110; PED 111; PED 112; PED 113; PED 114; PED 115; PED 116; PED 117; PED 118; PED 119; PED 125; PED 126; PED 128; PED 129; PED 130; PED 131; PED 141; PED 142; PED 143; PED 144; PED 145; PED 146; PED 147; PED 148; PED 150; PED 151; PED 170; PED 171; PED 172; PED 173; PED 174; PED 240; PED 250; PED 251; PED 252; PED 254; PED 255; PED 256

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 64-65**

**Students must meet the receiving university's foreign language and physical education requirement, if applicable, before or after transfer to the four-year institution.**

# PRE-BUSINESS ADMINISTRATION (AA)

## I. General Education (44 Semester Hour Core)

| | | | HOURS | | |
|---|---|---|---|---|---|
| | | | CLASS | LAB | CREDIT |

### A. Composition

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| ENG | 113 | Literature-Based Research | 3 | 0 | 3 |

### B. Humanities/Fine Arts

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| COM | 231 | Public Speaking | 3 | 0 | 3 |

**Select two of the following courses:**

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| ART | 111 | Art Appreciation | 3 | 0 | 3 |
| MUS | 110 | Music Appreciation | 3 | 0 | 3 |
| REL | 110 | World Religions | 3 | 0 | 3 |
| REL | 221 | Religion in America | 3 | 0 | 3 |
| REL | 211 | Introduction to Old Testament | 3 | 0 | 3 |
| REL | 212 | Introduction to New Testament | 3 | 0 | 3 |
| REL | 111 | Eastern Religions | 3 | 0 | 3 |
| REL | 112 | Western Religions | 3 | 0 | 3 |

**Select one course from the following:**

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| ENG | 231 | American Literature I | 3 | 0 | 3 |
| ENG | 232 | American Literature II | 3 | 0 | 3 |
| ENG | 233 | Major American Writers | 3 | 0 | 3 |
| ENG | 241 | British Literature I | 3 | 0 | 3 |
| ENG | 242 | British Literature II | 3 | 0 | 3 |
| ENG | 251 | Western World Literature I | 3 | 0 | 3 |
| ENG | 252 | Western World Literature II | 3 | 0 | 3 |
| ENG | 261 | World Literature I | 3 | 0 | 3 |
| ENG | 262 | World Literature II | 3 | 0 | 3 |

### C. Social Sciences

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| SOC | 210 | Introduction to Sociology | 3 | 0 | 3 |
| POL | 120 | American Government | 3 | 0 | 3 |
| HIS | 111 | World Civilizations I | 3 | 0 | 3 |
| HIS | 112 | World Civilizations II | 3 | 0 | 3 |

### D. Natural Sciences

**Select one of the following sequences:**

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| BIO | 111 | General Biology I | 3 | 3 | 4 |
| BIO | 112 | General Biology II | 3 | 3 | 4 |
| CHM | 151 | General Chemistry I | 3 | 3 | 4 |
| CHM | 152 | General Chemistry II | 3 | 3 | 4 |
| PHY | 151 | College Physics I | 3 | 3 | 4 |
| PHY | 152 | College Physics II | 3 | 3 | 4 |
| GEL | 111 | Introductory Geology | 3 | 2 | 4 |
| GEL | 120 | Physical Geology | 3 | 2 | 4 |

|  |  |  | HOURS | | |
|  |  |  | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|

**E. Mathematics**

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| MAT | 171 | Precalculus Algebra | 3 | 0 | 3 |
| MAT | 271 | Calculus I | 3 | 2 | 4 |

**II. Other Required Hours**

| | | | | | |
|---|---|---|---|---|---|
| ACC | 120 | Prin of Accounting I | 3 | 2 | 4 |
| ACC | 121 | Prin of Accounting II | 3 | 2 | 4 |
| CIS | 110 | Introduction to Computers | 2 | 2 | 3 |
| ECO | 251 | Prin of Microeconomics | 3 | 0 | 3 |
| ECO | 252 | Prin of Macroeconomics | 3 | 0 | 3 |
| MAT | 151 | Statistics I | 3 | 0 | 3 |

**Some four-year institutions may require MAT151A, Statistics Lab, 0-2-1.**

### TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 64-65

**Students must meet the receiving university's foreign language and physical education requirement, if applicable, before or after transfer to the four-year institution.**

# PRE-BUSINESS EDUCATION AND MARKETING EDUCATION (AA)

## I. General Education (44 Semester Hour Core)

|  |  |  | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| **A. Composition** | | | | | |
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| ENG | 113 | Literature-Based Research | 3 | 0 | 3 |
| **B. Humanities/Fine Arts** | | | | | |
| COM | 231 | Public Speaking | 3 | 0 | 3 |

**Select two courses from the following:**

| | | | | | |
|---|---|---|---|---|---|
| ART | 111 | Art Appreciation | 3 | 0 | 3 |
| MUS | 110 | Music Appreciation | 3 | 0 | 3 |

Foreign language lecture and lab are considered one course:

| | | | | | |
|---|---|---|---|---|---|
| SPA | 111 | Elementary Spanish I | 3 | 0 | 3 |
| SPA | 181 | Spanish Lab I | 0 | 2 | 1 |
| SPA | 112 | Elementary Spanish II | 3 | 0 | 3 |
| SPA | 182 | Spanish Lab II | 0 | 2 | 1 |
| SPA | 211 | Intermediate Spanish I | 3 | 0 | 3 |
| SPA | 281 | Spanish Lab III | 0 | 2 | 1 |
| SPA | 212 | Intermediate Spanish III | 3 | 0 | 3 |
| SPA | 282 | Spanish Lab IV | 0 | 2 | 1 |
| REL | 110 | World Religions | 3 | 0 | 3 |
| REL | 221 | Religion in America | 3 | 0 | 3 |
| REL | 211 | Intro to Old Testament | 3 | 0 | 3 |
| REL | 212 | Intro to New Testament | 3 | 0 | 3 |
| REL | 111 | Eastern Religions | 3 | 0 | 3 |
| REL | 112 | Western Religions | 3 | 0 | 3 |

**Select one of the following courses:**

| | | | | | |
|---|---|---|---|---|---|
| ENG | 231 | American Literature I | 3 | 0 | 3 |
| ENG | 232 | American Literature II | 3 | 0 | 3 |
| ENG | 233 | Major American Writers | 3 | 0 | 3 |
| ENG | 241 | British Literature I | 3 | 0 | 3 |
| ENG | 242 | British Literature II | 3 | 0 | 3 |
| ENG | 251 | Western World Literature I | 3 | 0 | 3 |
| ENG | 252 | Western World Literature II | 3 | 0 | 3 |
| ENG | 261 | World Literature I | 3 | 0 | 3 |
| ENG | 262 | World Literature II | 3 | 0 | 3 |
| **C. Social Sciences** | | | | | |
| ECO | 251 | Prin of Microeconomics | 3 | 0 | 3 |
| HIS | 111 | World Civilizations I | 3 | 0 | 3 |
| HIS | 112 | World Civilizations II | 3 | 0 | 3 |
| SOC | 210 | Intro to Sociology | 3 | 0 | 3 |

| | | | HOURS | | |
|---|---|---|---|---|---|
| | | | **CLASS** | **LAB** | **CREDIT** |

**D. Natural Sciences**

**Select one of the following sequences:**

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| BIO | 111 | General Biology I | 3 | 3 | 4 |
| BIO | 112 | General Biology II | 3 | 3 | 4 |
| CHM | 151 | General Chemistry I | 3 | 3 | 4 |
| CHM | 152 | General Chemistry II | 3 | 3 | 4 |
| PHY | 151 | College Physics I | 3 | 2 | 4 |
| PHY | 152 | College Physics II | 3 | 2 | 4 |
| GEL | 111 | Introductory Geology | 3 | 2 | 4 |
| GEL | 120 | Physical Geology | 3 | 2 | 4 |

**E. Mathematics and Computer Science**

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| MAT | 161 | College Algebra | 3 | 0 | 3 |
| CIS | 110 | Intro to Computers | 3 | 0 | 3 |

**II. Other Required Hours**

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| ACC | 120 | Prin of Accounting I | 3 | 2 | 4 |
| ACC | 121 | Prin of Accounting II | 3 | 2 | 4 |
| CIS | 115 | Intro to Program and Logic | 2 | 2 | 3 |
| ECO | 252 | Prin of Macroeconomics | 3 | 0 | 3 |
| MAT | 151 | Statistics I | 3 | 0 | 3 |
| MAT | 151A | Statistics I Lab | 0 | 2 | 1 |
| SOC | 225 | Social Diversity | 3 | 0 | 3 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 64-65**

**Students must meet the receiving university's foreign language and physical education requirement, if applicable, before or after transfer to the four-year institution.**

# PRE-COLLEGE TRANSFER NURSING (AA)

## I. General Education (44 Semester Hour Core)

| | | | HOURS<br>CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| **A. Composition** | | | | | |
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| ENG | 113 | Literature-Based Research | 3 | 0 | 3 |
| **B. Humanities/Fine Arts** | | | | | |
| COM | 231 | Public Speaking | 3 | 0 | 3 |
| **Select two of the following courses:** | | | | | |
| ART | 111 | Art Appreciation | 3 | 0 | 3 |
| MUS | 110 | Music Appreciation | 3 | 0 | 3 |
| REL | 110 | World Religions | 3 | 0 | 3 |
| REL | 221 | Religion in America | 3 | 0 | 3 |
| REL | 211 | Intro to Old Testament | 3 | 0 | 3 |
| REL | 212 | Intro to New Testament | 3 | 0 | 3 |
| REL | 111 | Eastern Religions | 3 | 0 | 3 |
| REL | 112 | Western Religions | 3 | 0 | 3 |
| **Select one of the following courses:** | | | | | |
| ENG | 231 | American Literature I | 3 | 0 | 3 |
| ENG | 232 | American Literature II | 3 | 0 | 3 |
| ENG | 233 | Major American Writers | 3 | 0 | 3 |
| ENG | 241 | British Literature I | 3 | 0 | 3 |
| ENG | 242 | British Literature II | 3 | 0 | 3 |
| ENG | 251 | Western World Literature I | 3 | 0 | 3 |
| ENG | 252 | Western World Literature II | 3 | 0 | 3 |
| ENG | 261 | World Literature I | 3 | 0 | 3 |
| ENG | 262 | World Literature II | 3 | 0 | 3 |
| **C. Social Sciences** | | | | | |
| PSY | 150 | General Psychology | 3 | 0 | 3 |
| PSY | 241 | Developmental Psychology | 3 | 0 | 3 |
| SOC | 210 | Intro to Sociology | 3 | 0 | 3 |
| **Select one of the following history courses:** | | | | | |
| HIS | 111 | World Civilizations I | 3 | 0 | 3 |
| HIS | 112 | World Civilizations II | 3 | 0 | 3 |
| **D. Natural Sciences** | | | | | |
| CHM | 151 | General Chemistry I | 3 | 3 | 4 |
| CHM | 152 | General Chemistry II | 3 | 3 | 4 |
| **E. Mathematics** | | | | | |
| MAT | 161 | College Algebra | 3 | 0 | 3 |
| MAT | 151 | Statistics I | 3 | 0 | 3 |
| MAT | 151A | Statistics I Lab | 0 | 2 | 1 |

## II. Other Required Hours

| | | | HOURS | | |
|---|---|---|---|---|---|
| | | | CLASS | LAB | CREDIT |
| BIO | 165 | Anatomy and Physiology I | 3 | 3 | 4 |
| BIO | 166 | Anatomy and Physiology II | 3 | 3 | 4 |
| BIO | 175 | General Microbiology | 2 | 2 | 3 |
| CIS | 110 | Intro to Computers | 2 | 2 | 3 |
| PSY | 281 | Abnormal Psychology | 3 | 0 | 3 |
| SOC | 213 | Sociology of the Family | 3 | 0 | 3 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 64-65**

**Students must meet the receiving university's foreign language and physical education requirement, if applicable, before or after transfer to the four-year institution.**

# PRE-ELEMENTARY EDUCATION, MIDDLE GRADES EDUCATION, AND SPECIAL EDUCATION (AA)

## I. General Education (44 Semester Hour Core)

|  |  |  | CLASS | LAB | CREDIT |
|---|---|---|:---:|:---:|:---:|
| **A. Composition** | | | | | |
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| ENG | 113 | Literature-Based Research | 3 | 0 | 3 |
| **B. Humanities/Fine Arts** | | | | | |
| COM | 231 | Public Speaking | 3 | 0 | 3 |

**Select one of the following courses:**

|  |  |  |  |  |  |
|---|---|---|:---:|:---:|:---:|
| ENG | 231 | American Literature I | 3 | 0 | 3 |
| ENG | 232 | American Literature II | 3 | 0 | 3 |
| ENG | 233 | Major American Writers | 3 | 0 | 3 |

**Select one of the following courses:**

|  |  |  |  |  |  |
|---|---|---|:---:|:---:|:---:|
| ART | 111 | Art Appreciation | 3 | 0 | 3 |
| ART | 114 | Art History Survey I | 3 | 0 | 3 |
| ART | 115 | Art History Survey II | 3 | 0 | 3 |
| MUS | 110 | Music Appreciation | 3 | 0 | 3 |

**Select one additional course from the following:**
Foreign language lecture and lab are considered one course.

|  |  |  |  |  |  |
|---|---|---|:---:|:---:|:---:|
| SPA | 111 | Elementary Spanish I | 3 | 0 | 3 |
| SPA | 181 | Spanish Lab I | 0 | 2 | 1 |
| SPA | 112 | Elementary Spanish II | 3 | 0 | 3 |
| SPA | 182 | Spanish Lab II | 0 | 2 | 1 |
| SPA | 211 | Intermediate Spanish I | 3 | 0 | 3 |
| SPA | 281 | Spanish Lab III | 0 | 2 | 1 |
| SPA | 212 | Intermediate Spanish II | 3 | 0 | 3 |
| SPA | 282 | Spanish Lab IV | 0 | 2 | 1 |
| PHI | 210 | History of Philosophy | 3 | 0 | 3 |
| REL | 110 | World Religions | 3 | 0 | 3 |
| REL | 221 | Religion in America | 3 | 0 | 3 |
| REL | 211 | Intro to Old Testament | 3 | 0 | 3 |
| REL | 212 | Intro to New Testament | 3 | 0 | 3 |
| REL | 111 | Eastern Religions | 3 | 0 | 3 |
| REL | 112 | Western Religions | 3 | 0 | 3 |
| **C. Social Sciences** | | | | | |
| PSY | 150 | General Psychology | 3 | 0 | 3 |

**Select one of the following courses:**

|  |  |  |  |  |  |
|---|---|---|:---:|:---:|:---:|
| SOC | 210 | Introduction to Sociology | 3 | 0 | 3 |
| SOC | 225 | Social Diversity | 3 | 0 | 3 |

| | | | HOURS | | |
|---|---|---|---|---|---|
| | | | CLASS | LAB | CREDIT |

**Select two courses from the following:**

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| HIS | 111 | World Civilizations I | 3 | 0 | 3 |
| HIS | 112 | World Civilizations II | 3 | 0 | 3 |
| HIS | 131 | American History I | 3 | 0 | 3 |
| HIS | 132 | American History II | 3 | 0 | 3 |

**Select one additional course from the following:**

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| POL | 120 | American Government | 3 | 0 | 3 |
| SOC | 213 | Sociology of the Family | 3 | 0 | 3 |
| SOC | 220 | Social Problems | 3 | 0 | 3 |
| PSY | 239 | Psychology of Personality | 3 | 0 | 3 |
| PSY | 241 | Developmental Psychology | 3 | 0 | 3 |
| PSY | 243 | Child Psychology | 3 | 0 | 3 |
| PSY | 281 | Abnormal Psychology | 3 | 0 | 3 |

**D. Natural Sciences**

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| BIO | 111 | General Biology | 3 | 3 | 4 |

**Select one of the following courses:**

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| CHM | 151 | General Chemistry I | 3 | 3 | 4 |
| PHY | 151 | College Physics I | 3 | 2 | 4 |

**E. Mathematics and Computer Science**

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| CIS | 110 | Introduction to Computers | 2 | 2 | 3 |
| MAT | 161 | College Algebra | 3 | 0 | 3 |

## II. Other Required Hours

It is recommended that within the 20 semester hours of "Other Required Hours," pre-education students in Elementary Education, Middle Grades Education, and Special Education select courses that will help meet the mandated academic (second major) concentration. These courses should be selected in conjunction with the requirements at each university, since academic (second major) concentrations differ on each campus. In order to be consistent with NC licensure areas, Middle Grades Education students should select course from up to two (2) of the following areas: Social Sciences, English, Mathematics, Sciences. (Note: UNC-Asheville students major in an academic area and the selected 20 hours should be in sync with their intended major/program.)

| | | | HOURS | | |
|---|---|---|---|---|---|
| | | | **CLASS** | **LAB** | **CREDIT** |

**Select two courses from the following:**
**English Literature**

| | | | | | |
|---|---|---|---|---|---|
| ENG | 241 | British Literature I | 3 | 0 | 3 |
| ENG | 242 | British Literature II | 3 | 0 | 3 |
| ENG | 261 | World Literature I | 3 | 0 | 3 |
| ENG | 262 | World Literature II | 3 | 0 | 3 |
| ENG | 231 | American Literature I | 3 | 0 | 3 |

**Social Science**

| | | | | | |
|---|---|---|---|---|---|
| HIS | 111 | World Civilizations I | 3 | 0 | 3 |
| HIS | 112 | World Civilizations II | 3 | 0 | 3 |
| HIS | 131 | American History I | 3 | 0 | 3 |
| HIS | 132 | American History II | 3 | 0 | 3 |
| PSY | 239 | Psychology of Personality | 3 | 0 | 3 |
| PSY | 241 | Developmental Psychology | 3 | 0 | 3 |
| PSY | 243 | Child Psychology | 3 | 0 | 3 |
| PSY | 281 | Abnormal Psychology | 3 | 0 | 3 |

**Science**

| | | | | | |
|---|---|---|---|---|---|
| BIO | 112 | General Biology II | 3 | 3 | 4 |
| BIO | 120 | Introductory Botany | 3 | 3 | 4 |
| BIO | 130 | Introductory Zoology | 3 | 3 | 4 |
| CHM | 151 | General Chemistry I | 3 | 3 | 4 |
| CHM | 152 | General Chemistry II | 3 | 3 | 4 |

**Up to 12 semester hours for biology concentration:**

| | | | | | |
|---|---|---|---|---|---|
| BIO | 112 | General Biology II | 3 | 3 | 4 |

**Choose one of the following courses:**

| | | | | | |
|---|---|---|---|---|---|
| BIO | 120 | Introductory Botany | 3 | 3 | 4 |
| BIO | 130 | Introductory Zoology | 3 | 3 | 4 |

The following courses are recommended:

| | | | | | |
|---|---|---|---|---|---|
| CHM | 151 | General Chemistry I | 3 | 3 | 4 |
| CHM | 152 | General Chemistry II | 3 | 3 | 4 |

**Select up to 8 semester hours for science concentration:**

| | | | | | |
|---|---|---|---|---|---|
| BIO | 112 | General Biology II | 3 | 3 | 4 |
| BIO | 120 | Introductory Botany | 3 | 3 | 4 |
| BIO | 130 | Introductory Zoology | 3 | 3 | 4 |

**Mathematics**

**A maximum of 12 semester hours selected from the following:**

| | | | | | |
|---|---|---|---|---|---|
| MAT | 151 | Statistics I | 3 | 0 | 3 |
| MAT | 151A | Statistics I Lab | 0 | 2 | 1 |
| MAT | 172 | Precalculus Trigonometry | 3 | 0 | 3 |

| | | | HOURS | | |
|---|---|---|---|---|---|
| | | | CLASS | LAB | CREDIT |
| MAT | 175 | Precalculus | 4 | 0 | 4 |
| MAT | 271 | Calculus I | 3 | 2 | 4 |
| MAT | 272 | Calculus II | 3 | 2 | 4 |

**III. Select one of the following physical education courses:**

PED 110; PED 111; PED 112; PED 113; PED 114; PED 115;
PED 116; PED 117; PED 118; PED 119; PED 125; PED 126;
PED 128; PED 129; PED 130; PED 131; PED 141; PED 142;
PED 143; PED 144; PED 145; PED 146; PED 147; PED 148;
PED 150; PED 151; PED 170; PED 171; PED 172; PED 173;
PED 174; PED 240; PED 250; PED 251; PED 252; PED 254;
PED 255; PED 256

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 64-65**

**Students must meet the receiving university's foreign language and physical education requirement, if applicable, before or after transfer to the four-year institution.**

# PRE-ENGLISH (AA)

## I. General Education (44 Semester-Hour Core)

|  |  |  | HOURS | | |
|---|---|---|---|---|---|
|  |  |  | **CLASS** | **LAB** | **CREDIT** |

### A. Composition

|  |  |  | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| ENG | 113 | Literature-Based Research | 3 | 0 | 3 |

### B. Humanities/Fine Arts

|  |  |  | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| COM | 231 | Public Speaking | 3 | 0 | 3 |

**Select two of the following courses:**

|  |  |  | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| ART | 111 | Art Appreciation | 3 | 0 | 3 |
| MUS | 110 | Music Appreciation | 3 | 0 | 3 |
| SPA | 111 | Elementary Spanish I | 3 | 0 | 3 |
| SPA | 112 | Elementary Spanish II | 3 | 0 | 3 |
| SPA | 211 | Intermediate Spanish I | 3 | 0 | 3 |
| SPA | 212 | Intermediate Spanish II | 3 | 0 | 3 |
| REL | 110 | World Religions | 3 | 0 | 3 |
| REL | 221 | Religion in America | 3 | 0 | 3 |
| REL | 211 | Intro to Old Testament | 3 | 0 | 3 |
| REL | 212 | Intro to New Testament | 3 | 0 | 3 |
| REL | 111 | Eastern Religions | 3 | 0 | 3 |
| REL | 112 | Western Religions | 3 | 0 | 3 |

**Select one course from the following:**

|  |  |  | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| ENG | 233 | Major American Writers | 3 | 0 | 3 |
| ENG | 241 | British Literature I | 3 | 0 | 3 |
| ENG | 242 | British Literature II | 3 | 0 | 3 |
| ENG | 251 | Western World Literature I | 3 | 0 | 3 |
| ENG | 252 | Western World Literature II | 3 | 0 | 3 |
| ENG | 261 | World Literature I | 3 | 0 | 3 |
| ENG | 262 | World Literature II | 3 | 0 | 3 |

### C. Social Sciences

|  |  |  | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| HIS | 111 | World Civilizations I | 3 | 0 | 3 |
| HIS | 112 | World Civilizations II | 3 | 0 | 3 |

**Select two of the following courses:**

|  |  |  | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| POL | 120 | American Government | 3 | 0 | 3 |
| PSY | 150 | General Psychology | 3 | 0 | 3 |
| SOC | 210 | Introduction to Sociology | 3 | 0 | 3 |

### D. Natural Sciences

**Select one of the following sequences:**

|  |  |  | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| BIO | 111 | General Biology I | 3 | 3 | 4 |
| BIO | 112 | General Biology II | 3 | 3 | 4 |

| | | | HOURS | | |
|---|---|---|---|---|---|
| | | | CLASS | LAB | CREDIT |
| CHM | 151 | General Chemistry I | 3 | 3 | 4 |
| CHM | 152 | General Chemistry II | 3 | 3 | 4 |
| PHY | 151 | College Physics I | 3 | 2 | 4 |
| PHY | 152 | College Physics II | 3 | 2 | 4 |
| GEL | 111 | Introductory Geology | 3 | 2 | 4 |
| GEL | 120 | Physical Geology | 3 | 2 | 4 |

Note: ACA 115, Success and Study Skills, 0-2-1, should be completed as soon as possible.

### E. Mathematics and Computer Science

| | | | | | |
|---|---|---|---|---|---|
| MAT | 161 | College Algebra | 3 | 0 | 3 |
| CIS | 110 | Introduction to Computers | 3 | 0 | 3 |

## II. Other Required Hours

| | | | | | |
|---|---|---|---|---|---|
| EDU | 116 | Intro to Education | 3 | 2 | 4 |
| ENG | 231 | American Literature I | 3 | 0 | 3 |
| ENG | 232 | American Literature II | 3 | 0 | 3 |
| HIS | 131 | American History I | 3 | 0 | 3 |
| HIS | 132 | American History II | 3 | 0 | 3 |

### Select two hours from the following courses:

| | | | | | |
|---|---|---|---|---|---|
| SPA | 181 | Spanish Lab I | 0 | 2 | 1 |
| SPA | 182 | Spanish Lab II | 0 | 2 | 1 |
| SPA | 281 | Spanish Lab III | 0 | 2 | 1 |
| SPA | 282 | Spanish Lab IV | 0 | 2 | 1 |

## III. Select two hours of the following physical education courses:

PED 110; PED 111; PED 112; PED 113; PED 114; PED 115; PED 116; PED 117; PED 118; PED 119; PED 125; PED 126; PED 128; PED 129; PED 130; PED 131; PED 141; PED 142; PED 143; PED 144; PED 145; PED 146; PED 147; PED 148; PED 150; PED 151; PED 170; PED 171; PED 172; PED 173; PED 174; PED 240; PED 250; PED 251; PED 252; PED 254; PED 255; PED 256

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 64-65**

# PRE-ENGLISH EDUCATION (AA)

## I. General Education (44 Semester Hour Core)

|  |  |  | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| **A. Composition** | | | | | |
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| ENG | 113 | Literature-Based Research | 3 | 0 | 3 |
| **B. Humanities/Fine Arts** | | | | | |
| COM | 231 | Public Speaking | 3 | 0 | 3 |

**Select two of the following courses:**

|  |  |  | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| ART | 111 | Art Appreciation | 3 | 0 | 3 |
| MUS | 110 | Music Appreciation | 3 | 0 | 3 |

Foreign language lecture and lab are considered one course.

|  |  |  | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| SPA | 111 | Elementary Spanish I | 3 | 0 | 3 |
| SPA | 181 | Spanish Lab I | 0 | 2 | 1 |
| SPA | 112 | Elementary Spanish II | 3 | 0 | 3 |
| SPA | 182 | Spanish Lab II | 0 | 2 | 1 |
| REL | 110 | World Religions | 3 | 0 | 3 |
| REL | 221 | Religion in America | 3 | 0 | 3 |
| REL | 211 | Intro to Old Testament | 3 | 0 | 3 |
| REL | 212 | Intro to New Testament | 3 | 0 | 3 |
| REL | 111 | Eastern Religions | 3 | 0 | 3 |
| REL | 112 | Western Religions | 3 | 0 | 3 |

**Select one of the following courses:**

|  |  |  | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| ENG | 231 | American Literature I | 3 | 0 | 3 |
| ENG | 232 | American Literature II | 3 | 0 | 3 |
| ENG | 233 | Major American Writers | 3 | 0 | 3 |
| ENG | 242 | British Literature II | 3 | 0 | 3 |
| ENG | 261 | World Literature I | 3 | 0 | 3 |
| ENG | 262 | World Literature II | 3 | 0 | 3 |

## C. Social Sciences

|  |  |  | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| PSY | 150 | General Psychology | 3 | 0 | 3 |

**Select three courses from the following: (one course must be HIS 111 or HIS 112)**

|  |  |  | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| HIS | 111 | World Civilizations I | 3 | 0 | 3 |
| HIS | 112 | World Civilizations II | 3 | 0 | 3 |
| POL | 120 | American Government | 3 | 0 | 3 |
| SOC | 210 | Intro to Sociology | 3 | 0 | 3 |
| SOC | 213 | Sociology of the Family | 3 | 0 | 3 |

|  |  |  | HOURS | | |
|  |  |  | CLASS | LAB | CREDIT |
|---|---|---|:---:|:---:|:---:|
| SOC | 220 | Social Problems | 3 | 0 | 3 |
| PSY | 239 | Psychology of Personality | 3 | 0 | 3 |
| PSY | 241 | Developmental Psychology | 3 | 0 | 3 |
| PSY | 281 | Abnormal Psychology | 3 | 0 | 3 |

### D. Natural Sciences

**Select one of the following sequences:**

| BIO | 111 | General Biology I | 3 | 3 | 4 |
|---|---|---|:---:|:---:|:---:|
| BIO | 112 | General Biology II | 3 | 3 | 4 |
| CHM | 151 | General Chemistry I | 3 | 3 | 4 |
| CHM | 152 | General Chemistry II | 3 | 3 | 4 |
| PHY | 151 | College Physics I | 3 | 2 | 4 |
| PHY | 152 | College Physics II | 3 | 2 | 4 |
| GEL | 111 | Introductory Geology | 3 | 2 | 4 |
| GEL | 120 | Physical Geology | 3 | 2 | 4 |

### E. Mathematics and Computer Science

| MAT | 161 | College Algebra | 3 | 0 | 3 |
|---|---|---|:---:|:---:|:---:|
| CIS | 110 | Intro to Computers | 2 | 2 | 3 |

Note: ACA 115, Success and Study Skills, 0-2-1, required in all two-year programs, should be taken early in the program.

## II. Other Required Courses

| ENG | 241 | British Literature I | 3 | 0 | 3 |
|---|---|---|:---:|:---:|:---:|
| EDU | 116 | Intro to Education | 3 | 2 | 4 |
| SPA | 211 | Intermediate Spanish I | 3 | 0 | 3 |
| SPA | 281 | Spanish Lab II | 0 | 2 | 1 |
| SPA | 212 | Intermediate Spanish II | 3 | 0 | 3 |
| SPA | 282 | Spanish Lab IV | 0 | 2 | 1 |

### Multicultural Studies

**Select one of the following courses:**

| ENG | 272 | Southern Literature | 3 | 0 | 3 |
|---|---|---|:---:|:---:|:---:|
| SOC | 225 | Social Diversity | 3 | 0 | 3 |

### Health

**Select one of the following courses:**

| HEA | 110 | Personal Health/Wellness | 3 | 0 | 3 |
|---|---|---|:---:|:---:|:---:|
| HEA | 120 | Community Health | 3 | 0 | 3 |

## III. Select two hours from the following physical education courses:

PED 110; PED 111; PED 112; PED 113; PED 114; PED 115; PED 116; PED 117; PED 118; PED 119; PED 125; PED 126; PED 128; PED 129; PED 130; PED 131; PED 141; PED 142; PED 143; PED 144; PED 145; PED 146; PED 147; PED 148;

PED 150; PED 151; PED 170; PED 171; PED 172; PED 173; PED 174; PED 240; PED 250; PED 251; PED 252; PED 254; PED 255; PED 256

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 64-65**

**Students must meet the receiving university's foreign language and physical education requirement, if applicable, before or after transfer to the four-year institution.**

# PRE-HEALTH EDUCATION (AA)

## I. General Education (44 Semester Hour Core)

|  |  |  | HOURS | | |
|---|---|---|---|---|---|
|  |  |  | CLASS | LAB | CREDIT |

### A. Composition
| | | | | | |
|---|---|---|---|---|---|
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| ENG | 113 | Literature-Based Research | 3 | 0 | 3 |

### B. Humanities/Fine Arts
| | | | | | |
|---|---|---|---|---|---|
| COM | 231 | Public Speaking | 3 | 0 | 3 |

**Select two of the following courses:**

| | | | | | |
|---|---|---|---|---|---|
| ART | 111 | Art Appreciation | 3 | 0 | 3 |
| MUS | 110 | Music Appreciation | 3 | 0 | 3 |

Foreign language lecture and lab are considered one course.

| | | | | | |
|---|---|---|---|---|---|
| SPA | 111 | Elementary Spanish I | 3 | 0 | 3 |
| SPA | 112 | Elementary Spanish II | 3 | 0 | 3 |
| REL | 211 | Intro to Old Testament | 3 | 0 | 3 |
| REL | 212 | Intro to New Testament | 3 | 0 | 3 |
| REL | 110 | World Religions | 3 | 0 | 3 |
| REL | 221 | Religion in America | 3 | 0 | 3 |
| REL | 111 | Eastern Religions | 3 | 0 | 3 |
| REL | 112 | Western Religions | 3 | 0 | 3 |

**Select one course from the following:**

| | | | | | |
|---|---|---|---|---|---|
| ENG | 231 | American Literature I | 3 | 0 | 3 |
| ENG | 232 | American Literature II | 3 | 0 | 3 |
| ENG | 233 | Major American Writers | 3 | 0 | 3 |
| ENG | 241 | British Literature I | 3 | 0 | 3 |
| ENG | 242 | British Literature II | 3 | 0 | 3 |
| ENG | 251 | Western World Literature I | 3 | 0 | 3 |
| ENG | 252 | Western World Literature II | 3 | 0 | 3 |
| ENG | 261 | World Literature I | 3 | 0 | 3 |
| ENG | 262 | World Literature II | 3 | 0 | 3 |

### C. Social Sciences
| | | | | | |
|---|---|---|---|---|---|
| PSY | 150 | General Psychology | 3 | 0 | 3 |

**Select three courses from the following. At least one course must be HIS 111 or HIS 112.**

| | | | | | |
|---|---|---|---|---|---|
| HIS | 111 | World Civilizations I | 3 | 0 | 3 |
| HIS | 112 | World Civilizations II | 3 | 0 | 3 |
| POL | 120 | American Government | 3 | 0 | 3 |
| SOC | 210 | Intro to Sociology | 3 | 0 | 3 |
| SOC | 213 | Sociology of the Family | 3 | 0 | 3 |

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| | | | **HOURS** | | |
| SOC | 220 | Social Problems | 3 | 0 | 3 |
| SOC | 225 | Social Diversity | 3 | 0 | 3 |
| PSY | 239 | Psychology of Personality | 3 | 0 | 3 |
| PSY | 241 | Developmental Psychology | 3 | 0 | 3 |
| PSY | 281 | Abnormal Psychology | 3 | 0 | 3 |

### D. Natural Sciences

**Select one of the following sequences:**

| | | | | | |
|---|---|---|---|---|---|
| BIO | 111 | General Biology I | 3 | 3 | 4 |
| BIO | 112 | General Biology II | 3 | 3 | 4 |
| CHM | 151 | General Chemistry I | 3 | 3 | 4 |
| CHM | 152 | General Chemistry II | 3 | 3 | 4 |
| GEL | 111 | Introductory Geology | 3 | 2 | 4 |
| GEL | 120 | Physical Geology | 3 | 2 | 4 |

### E. Mathematics

| | | | | | |
|---|---|---|---|---|---|
| MAT | 151 | Statistics I | 3 | 0 | 3 |
| MAT | 151A | Statistics I Lab | 0 | 2 | 1 |
| MAT | 161 | College Algebra | 3 | 0 | 3 |

Note: ACA 115, Success and Study Skills, 0-2-1, required in all two-year programs, should be completed early in the program.

### II. Other Required Hours

| | | | | | |
|---|---|---|---|---|---|
| BIO | 165 | Anatomy and Physiology I | 3 | 3 | 4 |
| BIO | 166 | Anatomy and Physiology II | 3 | 3 | 4 |
| CIS | 110 | Intro to Computers | 3 | 0 | 3 |
| HEA | 110 | Personal Health/Wellness | 3 | 0 | 3 |
| HEA | 112 | First Aid and CPR | 1 | 2 | 2 |
| HEA | 120 | Community Health | 3 | 0 | 3 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 64-65**

**Students must meet the receiving university's foreign language and physical education requirement, if applicable, before or after transfer to the four-year institution.**

# PRE-HISTORY (AA)

## I. General Education (44 Semester Hour Core)

|  |  |  |  | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|---|
| **A. Composition** | | | | | | |
| | ENG | 111 | Expository Writing | 3 | 0 | 3 |
| | ENG | 113 | Literature-Based Writing | 3 | 0 | 3 |
| **B. Humanities/Fine Arts** | | | | | | |
| | COM | 231 | Public Speaking | 3 | 0 | 3 |

**Select two of the following courses:**

|  |  |  |  | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|---|
| ART | 111 | Art Appreciation | 3 | 0 | 3 |
| MUS | 110 | Music Appreciation | 3 | 0 | 3 |
| REL | 110 | World Religions | 3 | 0 | 3 |
| REL | 221 | Religion in America | 3 | 0 | 3 |
| REL | 211 | Intro to Old Testament | 3 | 0 | 3 |
| REL | 212 | Intro to New Testament | 3 | 0 | 3 |
| REL | 111 | Eastern Religions | 3 | 0 | 3 |
| REL | 112 | Western Religions | 3 | 0 | 3 |

**Select one of the following courses:**

|  |  |  |  | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|---|
| ENG | 233 | Major American Writers | 3 | 0 | 3 |
| ENG | 251 | Western World Literature I | 3 | 0 | 3 |
| ENG | 252 | Western World Literature II | 3 | 0 | 3 |
| ENG | 261 | World Literature I | 3 | 0 | 3 |
| ENG | 262 | World Literature II | 3 | 0 | 3 |

## C. Social Sciences

|  |  |  |  | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|---|
| HIS | 111 | World Civilizations I | 3 | 0 | 3 |
| HIS | 112 | World Civilizations II | 3 | 0 | 3 |
| PSY | 150 | General Psychology | 3 | 0 | 3 |
| SOC | 210 | Introduction to Sociology | 3 | 0 | 3 |

## D. Natural Sciences

**Select one of the following sequences:**

|  |  |  |  | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|---|
| BIO | 111 | General Biology I | 3 | 3 | 4 |
| BIO | 112 | General Biology II | 3 | 3 | 4 |
| CHM | 151 | Chemistry I | 3 | 3 | 4 |
| CHM | 152 | Chemistry II | 3 | 3 | 4 |
| PHY | 151 | Physics I | 3 | 2 | 4 |
| PHY | 152 | Physics II | 3 | 2 | 4 |
| GEL | 111 | Introductory Geology | 3 | 2 | 4 |
| GEL | 120 | Physical Geology | 3 | 2 | 4 |

|  | | | HOURS | | |
|---|---|---|---|---|---|
|  | | | CLASS | LAB | CREDIT |

**E. Mathematics and Computer Science**

|  | | | | | |
|---|---|---|---|---|---|
| MAT | 161 | College Algebra | 3 | 0 | 3 |
| CIS | 110 | Intro to Computers | 2 | 2 | 3 |

Note: ACA 115, Success and Study Skills, 0-2-1, required in all two-year programs should be completed as soon as possible.

**II. Other Required Hours**

|  | | | | | |
|---|---|---|---|---|---|
| HIS | 131 | American History I | 3 | 0 | 3 |
| HIS | 132 | American History II | 3 | 0 | 3 |
| ENG | 231 | American Literature I | 3 | 0 | 3 |
| ENG | 241 | British Literature I | 3 | 0 | 3 |
| ENG | 242 | British Literature II | 3 | 0 | 3 |
| SOC | 220 | Social Problems | 3 | 0 | 3 |

**III. Select two hours of the following physical education courses:**

PED 110; PED 111; PED 112; PED 113; PED 114; PED 115; PED 116; PED 117; PED 118; PED 119; PED 125; PED 126; PED 128; PED 129; PED 130; PED 131; PED 141; PED 142; PED 143; PED 144; PED 145; PED 146; PED 147; PED 148; PED 150; PED 151; PED 170; PED 171; PED 172; PED 173; PED 174; PED 240; PED 250; PED 251; PED 252; PED 254; PED 255; PED 256

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 64-65**

**Students must meet the receiving university's foreign language and physical education requirement, if applicable, before or after transfer to the four-year institution.**

# PRE-PHYSICAL EDUCATION (AA)

I. **General Education (44 Semester Hour Core)**

|  |  |  | **HOURS** |  |
|---|---|---|---|---|
|  |  | **CLASS** | **LAB** | **CREDIT** |

A. **Composition**

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| ENG | 112 | Argument-Based Research | 3 | 0 | 3 |

B. **Humanities/Fine Arts**

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| COM | 231 | Public Speaking | 3 | 0 | 3 |

**Select two of the following courses:**

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| ART | 111 | Art Appreciation | 3 | 0 | 3 |
| MUS | 110 | Music Appreciation | 3 | 0 | 3 |
| REL | 110 | World Religions | 3 | 0 | 3 |
| REL | 221 | Religion in America | 3 | 0 | 3 |
| REL | 211 | Intro to Old Testament | 3 | 0 | 3 |
| REL | 212 | Intro to New Testament | 3 | 0 | 3 |
| REL | 111 | Eastern Religions | 3 | 0 | 3 |
| REL | 112 | Western Religions | 3 | 0 | 3 |

Foreign language lecture and lab are considered one course.

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| SPA | 111 | Elementary Spanish I | 3 | 0 | 3 |
| SPA | 181 | Spanish Lab I | 0 | 2 | 1 |
| SPA | 112 | Elementary Spanish II | 3 | 0 | 3 |
| SPA | 182 | Spanish Lab II | 0 | 2 | 1 |
| SPA | 211 | Intermediate Spanish I | 3 | 0 | 3 |
| SPA | 281 | Spanish Lab III | 0 | 2 | 1 |
| SPA | 212 | Intermediate Spanish II | 3 | 0 | 3 |
| SPA | 282 | Spanish Lab IV | 0 | 2 | 1 |

**Select one of the following courses:**

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| ENG | 231 | American Literature I | 3 | 0 | 3 |
| ENG | 232 | American Literature II | 3 | 0 | 3 |
| ENG | 241 | British Literature I | 3 | 0 | 3 |
| ENG | 242 | British Literature II | 3 | 0 | 3 |
| ENG | 251 | Western World Literature I | 3 | 0 | 3 |
| ENG | 252 | Western World Literature II | 3 | 0 | 3 |
| ENG | 261 | World Literature I | 3 | 0 | 3 |
| ENG | 262 | World Literature II | 3 | 0 | 3 |

C. **Social Sciences**

**Select four of the following courses: (one course must be PSY 150 and one course must be HIS 111 or HIS 112)**

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| PSY | 150 | General Psychology | 3 | 0 | 3 |
| HIS | 111 | World Civilization I | 3 | 0 | 3 |

| | | | HOURS | | |
|---|---|---|---|---|---|
| | | | **CLASS** | **LAB** | **CREDIT** |
| HIS | 112 | World Civilization II | 3 | 0 | 3 |
| SOC | 210 | Intro to Sociology | 3 | 0 | 3 |
| SOC | 213 | Sociology of the Family | 3 | 0 | 3 |
| SOC | 220 | Social Problems | 3 | 0 | 3 |

**D. Natural Sciences**

| | | | | | |
|---|---|---|---|---|---|
| BIO | 111 | General Biology I | 3 | 3 | 4 |
| BIO | 112 | General Biology II | 3 | 3 | 4 |

**E. Mathematics and Computer Science**

| | | | | | |
|---|---|---|---|---|---|
| MAT | 161 | College Algebra | 3 | 0 | 3 |
| CIS | 110 | Introduction to Computers | 2 | 2 | 3 |

Note: ACA 115, Success and Study Skills, 0-2-1, required for all two-year programs, should be completed as soon as possible.

**II. Other Required Hours**

| | | | | | |
|---|---|---|---|---|---|
| BIO | 165 | Anatomy and Physiology I | 3 | 3 | 4 |
| BIO | 166 | Anatomy and Physiology II | 3 | 3 | 4 |
| PED | 110 | Fit and Well for Life | 1 | 2 | 2 |

**Select one of the following courses:**

| | | | | | |
|---|---|---|---|---|---|
| HEA | 110 | Personal Health/Wellness | 3 | 0 | 3 |
| HEA | 120 | Community Health | 3 | 0 | 3 |

**Select one of the following courses:**

| | | | | | |
|---|---|---|---|---|---|
| HIS | 131 | American History I | 3 | 0 | 3 |
| HIS | 132 | American History II | 3 | 0 | 3 |
| PSY | 239 | Psychology of Personality | 3 | 0 | 3 |
| PSY | 241 | Developmental Psychology | 3 | 0 | 3 |
| PSY | 281 | Abnormal Psychology | 3 | 0 | 3 |

**III. Select two hours of the following physical education courses:**

PED 110; PED 111; PED 112; PED 113; PED 114; PED 115; PED 116; PED 117; PED 118; PED 119; PED 125; PED 126; PED 128; PED 129; PED 130; PED 131; PED 141; PED 142; PED 143; PED 144; PED 145; PED 146; PED 147; PED 148; PED 150; PED 151; PED 170; PED 171; PED 172; PED 173; PED 174; PED 240; PED 250; PED 251; PED 252; PED 254; PED 255; PED 256

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 64-65**

**Students must meet the receiving university's foreign language and physical education requirement, if applicable, before or after transfer to the four-year institution.**

# PRE-POLITICAL SCIENCE (AA)

I. **General Education (44 Semester Hour Core)**

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| | | | **HOURS** | | |

A. **Composition**

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| ENG | 113 | Literature-Based Research | 3 | 0 | 3 |

B. **Humanities/Fine Arts**

| | | | | | |
|---|---|---|---|---|---|
| COM | 231 | Public Speaking | 3 | 0 | 3 |

**Select two of the following courses:**

| | | | | | |
|---|---|---|---|---|---|
| ART | 111 | Art Appreciation | 3 | 0 | 3 |
| MUS | 110 | Music Appreciation | 3 | 0 | 3 |

Foreign language lecture and lab are considered one course.

| | | | | | |
|---|---|---|---|---|---|
| SPA | 111 | Elementary Spanish I | 3 | 0 | 3 |
| SPA | 181 | Spanish Lab I | 0 | 2 | 1 |
| SPA | 112 | Elementary Spanish II | 3 | 0 | 3 |
| SPA | 182 | Spanish Lab II | 0 | 2 | 1 |
| SPA | 211 | Intermediate Spanish I | 3 | 0 | 3 |
| SPA | 281 | Spanish Lab III | 0 | 2 | 1 |
| SPA | 212 | Intermediate Spanish II | 3 | 0 | 3 |
| SPA | 282 | Spanish Lab IV | 0 | 2 | 1 |
| REL | 110 | World Religions | 3 | 0 | 3 |
| REL | 221 | Religion in America | 3 | 0 | 3 |
| REL | 211 | Intro to Old Testament | 3 | 0 | 3 |
| REL | 212 | Intro to New Testament | 3 | 0 | 3 |
| REL | 111 | Eastern Religions | 3 | 0 | 3 |
| REL | 112 | Western Religions | 3 | 0 | 3 |

**Select one of the following courses:**

| | | | | | |
|---|---|---|---|---|---|
| ENG | 231 | American Literature I | 3 | 0 | 3 |
| ENG | 232 | American Literature II | 3 | 0 | 3 |
| ENG | 241 | British Literature I | 3 | 0 | 3 |
| ENG | 242 | British Literature II | 3 | 0 | 3 |
| ENG | 251 | Western World Literature I | 3 | 0 | 3 |
| ENG | 252 | Western World Literature II | 3 | 0 | 3 |
| ENG | 261 | World Literature I | 3 | 0 | 3 |
| ENG | 262 | World Literature II | 3 | 0 | 3 |

C. **Social Sciences**

**Select four courses from the following. One course must be PSY 150 and one course must be HIS 111 or HIS 112.**

| | | | | | |
|---|---|---|---|---|---|
| GEO | 111 | World Regional Geography | 3 | 0 | 3 |
| PSY | 150 | General Psychology | 3 | 0 | 3 |
| HIS | 111 | World Civilizations I | 3 | 0 | 3 |
| HIS | 112 | World Civilizations II | 3 | 0 | 3 |
| SOC | 210 | Introduction to Sociology | 3 | 0 | 3 |
| PSY | 239 | Psychology of Personality | 3 | 0 | 3 |

|  |  |  | HOURS | | |
|---|---|---|---|---|---|
|  |  |  | **CLASS** | **LAB** | **CREDIT** |

**D. Natural Sciences**

**Select one of the following sequences:**

|  |  |  | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| BIO | 111 | General Biology I | 3 | 3 | 4 |
| BIO | 112 | General Biology II | 3 | 3 | 4 |
| CHM | 151 | General Chemistry I | 3 | 3 | 4 |
| CHM | 152 | General Chemistry II | 3 | 3 | 4 |
| PHY | 151 | College Physics I | 3 | 2 | 4 |
| PHY | 152 | College Physics II | 3 | 2 | 4 |
| GEL | 111 | Introductory Geology | 3 | 2 | 4 |
| GEL | 120 | Physical Geology | 3 | 2 | 4 |

**E. Mathematics and Computer Science**

| | | | | | |
|---|---|---|---|---|---|
| MAT | 161 | College Algebra | 3 | 0 | 3 |
| CIS | 110 | Introduction to Computers | 3 | 0 | 3 |

Note: ACA 115, Success and Study Skills, 0-2-1, required for all two-year programs, should be completed as soon as possible.

**II. Other Required Courses**

| | | | | | |
|---|---|---|---|---|---|
| ECO | 251 | Principles of Microeconomics | 3 | 0 | 3 |
| ECO | 252 | Principles of Macroeconomics | 3 | 0 | 3 |
| POL | 110 | Introduction to Political Science | 3 | 0 | 3 |
| POL | 120 | American Government | 3 | 0 | 3 |
| POL | 220 | International Relations | 3 | 0 | 3 |

**Select one of the following courses:**

| | | | | | |
|---|---|---|---|---|---|
| HIS | 131 | American History I | 3 | 0 | 3 |
| HIS | 132 | American History II | 3 | 0 | 3 |

**III. Select one of the following physical education courses:**

PED 110; PED 111; PED 112; PED 113; PED 114; PED 115; PED 116; PED 117; PED 118; PED 119; PED 125; PED 126; PED 128; PED 129; PED 130; PED 131; PED 141; PED 142; PED 143; PED 144; PED 145; PED 146; PED 147; PED 148; PED 150; PED 151; PED 170; PED 171; PED 172; PED 173; PED 174; PED 240; PED 250; PED 251; PED 252; PED 254; PED 255; PED 256

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 64-65**

**Students must meet the receiving university's foreign language and physical education requirement, if applicable, before or after transfer to the four-year institution.**

# PRE-PSYCHOLOGY (AA)

## I. General Education (44 Semester Hour Core)

|  | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|

### A. Composition

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| ENG | 113 | Literature-Based Research | 3 | 0 | 3 |

### B. Humanities and Fine Arts

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| COM | 231 | Public Speaking | 3 | 0 | 3 |

**Select two of the following courses:**

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| ART | 111 | Art Appreciation | 3 | 0 | 3 |
| MUS | 110 | Music Appreciation | 3 | 0 | 3 |
| REL | 110 | World Religions | 3 | 0 | 3 |
| REL | 221 | Religion in America | 3 | 0 | 3 |
| REL | 211 | Intro to Old Testament | 3 | 0 | 3 |
| REL | 212 | Intro to New Testament | 3 | 0 | 3 |
| REL | 111 | Eastern Religions | 3 | 0 | 3 |
| REL | 112 | Western Religions | 3 | 0 | 3 |

Foreign language lecture and lab are considered one course.

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| SPA | 111 | Elementary Spanish I | 3 | 0 | 3 |
| SPA | 181 | Spanish Lab I | 0 | 2 | 1 |
| SPA | 112 | Elementary Spanish II | 3 | 0 | 3 |
| SPA | 182 | Spanish Lab II | 0 | 2 | 1 |
| SPA | 211 | Intermediate Spanish I | 3 | 0 | 3 |
| SPA | 281 | Spanish Lab III | 0 | 2 | 1 |

**Select one of the following courses:**

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| ENG | 231 | American Literature I | 3 | 0 | 3 |
| ENG | 232 | American Literature II | 3 | 0 | 3 |
| ENG | 233 | Major American Writers | 3 | 0 | 3 |
| ENG | 241 | British Literature I | 3 | 0 | 3 |
| ENG | 242 | British Literature II | 3 | 0 | 3 |
| ENG | 251 | Western World Literature I | 3 | 0 | 3 |
| ENG | 252 | Western World Literature II | 3 | 0 | 3 |
| ENG | 261 | World Literature I | 3 | 0 | 3 |
| ENG | 262 | World Literature II | 3 | 0 | 3 |

### C. Social Sciences

**Select four courses from the following: One course must be PSY 150, General Psychology; one sequence of history; and one required course, SOC 210, Introduction to Sociology.**

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| PSY | 150 | General Psychology | 3 | 0 | 3 |
| SOC | 210 | Introduction to Sociology | 3 | 0 | 3 |
| HIS | 111 | World Civilizations I | 3 | 0 | 3 |

| | | | HOURS | | |
|---|---|---|---|---|---|
| | | | **CLASS** | **LAB** | **CREDIT** |
| HIS | 112 | World Civilizations II | 3 | 0 | 3 |
| HIS | 131 | American History I | 3 | 0 | 3 |
| HIS | 132 | American History II | 3 | 0 | 3 |

**D. Natural Sciences**

| | | | | | |
|---|---|---|---|---|---|
| BIO | 111 | General Biology I | 3 | 3 | 4 |
| BIO | 112 | General Biology II | 3 | 3 | 4 |

Note: ACA 115, Success and Study Skills, 0-2-1, should be completed as soon as possible.

**E. Mathematics and Computer Science**

| | | | | | |
|---|---|---|---|---|---|
| MAT | 161 | College Algebra | 3 | 0 | 3 |
| CIS | 110 | Introduction to Computers | 2 | 2 | 3 |

**II. Other Required Hours**

| | | | | | |
|---|---|---|---|---|---|
| PSY | 241 | Developmental Psychology | 3 | 0 | 3 |
| PSY | 243 | Child Psychology | 3 | 0 | 3 |
| PSY | 281 | Abnormal Psychology | 3 | 0 | 3 |

**Select one of the following courses:**

| | | | | | |
|---|---|---|---|---|---|
| SOC | 213 | Sociology of the Family | 3 | 0 | 3 |
| SOC | 220 | Social Problems | 3 | 0 | 3 |

**III. Select two hours of the following physical education courses:**

PED 110; PED 111; PED 112; PED 113; PED 114; PED 115; PED 116; PED 117; PED 118; PED 119; PED 125; PED 126; PED 128; PED 129; PED 130; PED 131; PED 141; PED 142; PED 143; PED 144; PED 145; PED 146; PED 147; PED 148; PED 150; PED 151; PED 170; PED 171; PED 172; PED 173; PED 174; PED 240; PED 250; PED 251; PED 252; PED 254; PED 255; PED 256

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 64-65**

**Students must meet the receiving university's foreign language and physical education requirement, if applicable, before or after transfer to the four-year institution.**

# PRE-SOCIAL SCIENCE:
## SECONDARY EDUCATION (AA)

## I. General Education (44 Semester Hour Core)

| | | | HOURS | | |
|---|---|---|:---:|:---:|:---:|
| | | | **CLASS** | **LAB** | **CREDIT** |

### A. Composition

| | | | CLASS | LAB | CREDIT |
|---|---|---|:---:|:---:|:---:|
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| ENG | 113 | Literature-Based Research | 3 | 0 | 3 |

### B. Humanities/Fine Arts

| | | | CLASS | LAB | CREDIT |
|---|---|---|:---:|:---:|:---:|
| COM | 231 | Public Speaking | 3 | 0 | 3 |

**Select two of the following courses:**

| | | | CLASS | LAB | CREDIT |
|---|---|---|:---:|:---:|:---:|
| ART | 111 | Art Appreciation | 3 | 0 | 3 |
| MUS | 110 | Music Appreciation | 3 | 0 | 3 |
| REL | 110 | World Religions | 3 | 0 | 3 |
| REL | 221 | Religion in America | 3 | 0 | 3 |
| REL | 211 | Intro to Old Testament | 3 | 0 | 3 |
| REL | 212 | Intro to New Testament | 3 | 0 | 3 |
| REL | 111 | Eastern Religions | 3 | 0 | 3 |
| REL | 112 | Western Religions | 3 | 0 | 3 |

Foreign language lecture and lab are considered one course.

| | | | CLASS | LAB | CREDIT |
|---|---|---|:---:|:---:|:---:|
| SPA | 111 | Elementary Spanish I | 3 | 0 | 3 |
| SPA | 181 | Spanish Lab I | 0 | 2 | 1 |
| SPA | 112 | Elementary Spanish II | 3 | 0 | 3 |
| SPA | 182 | Spanish Lab II | 0 | 2 | 1 |
| SPA | 211 | Intermediate Spanish I | 3 | 0 | 3 |
| SPA | 281 | Spanish Lab III | 0 | 2 | 1 |
| SPA | 212 | Intermediate Spanish II | 3 | 0 | 3 |
| SPA | 282 | Spanish Lab IV | 0 | 2 | 1 |

**Select one of the following courses:**

| | | | CLASS | LAB | CREDIT |
|---|---|---|:---:|:---:|:---:|
| ENG | 231 | American Literature I | 3 | 0 | 3 |
| ENG | 232 | American Literature II | 3 | 0 | 3 |
| ENG | 241 | British Literature I | 3 | 0 | 3 |
| ENG | 242 | British Literature II | 3 | 0 | 3 |
| ENG | 251 | Western World Literature I | 3 | 0 | 3 |
| ENG | 252 | Western World Literature II | 3 | 0 | 3 |
| ENG | 261 | World Literature I | 3 | 0 | 3 |
| ENG | 262 | World Literature II | 3 | 0 | 3 |

### C. Social Sciences

| | | | CLASS | LAB | CREDIT |
|---|---|---|:---:|:---:|:---:|
| HIS | 111 | World Civilizations I | 3 | 0 | 3 |
| HIS | 112 | World Civilizations II | 3 | 0 | 3 |
| POL | 120 | American Government | 3 | 0 | 3 |
| SOC | 210 | Intro to Sociology | 3 | 0 | 3 |

|  | | | HOURS | | |
|--|--|--|-------|--|--|
|  | | | **CLASS** | **LAB** | **CREDIT** |

### D. Natural Sciences

**Select one of the following sequences:**

| | | | CLASS | LAB | CREDIT |
|--|--|--|------|-----|--------|
| BIO | 111 | General Biology I | 3 | 3 | 4 |
| BIO | 112 | General Biology II | 3 | 3 | 4 |
| CHM | 151 | General Chemistry I | 3 | 3 | 4 |
| CHM | 152 | General Chemistry II | 3 | 3 | 4 |
| PHY | 151 | College Physics I | 3 | 3 | 4 |
| PHY | 152 | College Physics II | 3 | 3 | 4 |
| GEL | 111 | Introductory Geology | 3 | 2 | 4 |
| GEL | 120 | Physical Geology | 3 | 2 | 4 |

### E. Mathematics and Computer Science

| | | | CLASS | LAB | CREDIT |
|--|--|--|------|-----|--------|
| MAT | 161 | College Algebra | 3 | 0 | 3 |
| CIS | 110 | Intro to Computers | 2 | 2 | 3 |

Note: ACA 115, Success and Study Skills, 0-2-1, required in all two-year programs, should be completed as soon as possible.

### II. Other Required Hours

| | | | CLASS | LAB | CREDIT |
|--|--|--|------|-----|--------|
| GEO | 111 | World Regional Geography | 3 | 0 | 3 |
| HIS | 131 | American History I | 3 | 0 | 3 |
| HIS | 132 | American History II | 3 | 0 | 3 |
| ECO | 251 | Principles of Microeconomics | 3 | 0 | 3 |
| ECO | 252 | Principles of Macroeconomics | 3 | 0 | 3 |

### III. Select one hour from the following physical education courses:

PED 110; PED 111; PED 112; PED 113; PED 114; PED 115; PED 116; PED 117; PED 118; PED 119; PED 125; PED 126; PED 128; PED 129; PED 130; PED 131; PED 141; PED 142; PED 143; PED 144; PED 145; PED 146; PED 147; PED 148; PED 150; PED 151; PED 170; PED 171; PED 172; PED 173; PED 174; PED 240; PED 250; PED 251; PED 252; PED 254; PED 255; PED 256

### TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 64-65

Students must meet the receiving university's foreign language and physical education requirement, if applicable, before or after transfer to the four-year institution.

# PRE-SOCIOLOGY (AA)

## I. General Education (44 Semester Hour Core)

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| **A. Composition** | | | | | |
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| ENG | 113 | Literature-Based Research | 3 | 0 | 3 |
| **B. Humanities/Fine Arts** | | | | | |
| COM | 231 | Public Speaking | 3 | 0 | 3 |

**Select two of the following courses:**

| | | | | | |
|---|---|---|---|---|---|
| ART | 111 | Art Appreciation | 3 | 0 | 3 |
| MUS | 110 | Music Appreciation | 3 | 0 | 3 |

Foreign language lecture and lab are considered one course.

| | | | | | |
|---|---|---|---|---|---|
| SPA | 111 | Elementary Spanish I | 3 | 0 | 3 |
| SPA | 181 | Spanish Lab I | 0 | 2 | 1 |
| SPA | 112 | Elementary Spanish II | 3 | 0 | 3 |
| SPA | 182 | Spanish Lab II | 0 | 2 | 1 |
| SPA | 211 | Intermediate Spanish I | 3 | 0 | 3 |
| SPA | 281 | Spanish Lab III | 0 | 2 | 1 |
| SPA | 212 | Intermediate Spanish II | 3 | 0 | 3 |
| SPA | 282 | Spanish Lab IV | 0 | 2 | 1 |
| REL | 110 | World Religion | 3 | 0 | 3 |
| REL | 221 | Religion in America | 3 | 0 | 3 |
| REL | 211 | Intro to Old Testament | 3 | 0 | 3 |
| REL | 212 | Intro to New Testament | 3 | 0 | 3 |
| REL | 111 | Eastern Religion | 3 | 0 | 3 |
| REL | 112 | Western Religion | 3 | 0 | 3 |

**Select one course from the following:**

| | | | | | |
|---|---|---|---|---|---|
| ENG | 231 | American Literature I | 3 | 0 | 3 |
| ENG | 232 | American Literature II | 3 | 0 | 3 |
| ENG | 233 | Major American Writers | 3 | 0 | 3 |
| ENG | 241 | British Literature I | 3 | 0 | 3 |
| ENG | 242 | British Literature II | 3 | 0 | 3 |
| ENG | 251 | Western World Literature I | 3 | 0 | 3 |
| ENG | 252 | Western World Literature II | 3 | 0 | 3 |
| ENG | 261 | World Literature I | 3 | 0 | 3 |
| ENG | 262 | World Literature II | 3 | 0 | 3 |
| **C. Social Sciences** | | | | | |
| HIS | 111 | World Civilizations I | 3 | 0 | 3 |
| HIS | 112 | World Civilizations II | 3 | 0 | 3 |
| SOC | 210 | Intro to Sociology | 3 | 0 | 3 |
| SOC | 225 | Social Diversity | 3 | 0 | 3 |

|  |  |  | **HOURS** | | |
|---|---|---|---|---|---|
|  |  |  | **CLASS** | **LAB** | **CREDIT** |

**D. Natural Sciences**

**Select one of the following sequences:**

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| BIO | 111 | General Biology I | 3 | 3 | 4 |
| BIO | 112 | General Biology II | 3 | 3 | 4 |
| CHM | 151 | General Chemistry I | 3 | 3 | 4 |
| CHM | 152 | General Chemistry II | 3 | 3 | 4 |
| PHY | 151 | College Physics I | 3 | 3 | 4 |
| PHY | 152 | College Physics II | 3 | 3 | 4 |
| GEL | 111 | Introductory Geology | 3 | 2 | 4 |
| GEL | 120 | Physical Geology | 3 | 2 | 4 |

**E. Mathematics**

| | | | | | |
|---|---|---|---|---|---|
| MAT | 161 | College Algebra | 3 | 0 | 3 |
| MAT | 151 | Statistics I | 3 | 0 | 3 |
| MAT | 151A | Statistics I Lab | 0 | 2 | 1 |

Note: ACA 115, Success and Study Skills, 0-2-1, required in all two-year programs, should be completed as soon as possible.

**II. Other Required Hours**

| | | | | | |
|---|---|---|---|---|---|
| CIS | 110 | Introduction to Computers | 2 | 2 | 3 |
| ENG | 272 | Southern Literature | 3 | 0 | 3 |
| GEO | 111 | World Regional Geography | 3 | 0 | 3 |
| REL | 110 | World Religions | 3 | 0 | 3 |
| REL | 221 | Religion in America | 3 | 0 | 3 |
| PSY | 150 | General Psychology | 3 | 0 | 3 |

**III. Select one hour from the following physical education courses:**

PED 110; PED 111; PED 112; PED 113; PED 114; PED 115; PED 116; PED 117; PED 118; PED 119; PED 125; PED 126; PED 128; PED 129; PED 130; PED 131; PED 141; PED 142; PED 143; PED 144; PED 145; PED 146; PED 147; PED 148; PED 150; PED 151; PED 170; PED 171; PED 172; PED 173; PED 174; PED 240; PED 250; PED 251; PED 252; PED 254; PED 255; PED 256

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 64-65**

**Students must meet the receiving university's foreign language and physical education requirement, if applicable, before or after transfer to the four-year institution.**

# PRE-TECHNOLOGY EDUCATION (AA)

## I. General Education (44 Semester Hour Core)

|  |  | CLASS | LAB | CREDIT |
|---|---|---|---|---|
|  |  | **HOURS** | | |

### A. Composition

| ENG 111 | Expository Writing | 3 | 0 | 3 |
|---|---|---|---|---|

**Select one of the following courses:**

| ENG 112 | Argument-Based Research | 3 | 0 | 3 |
|---|---|---|---|---|
| ENG 113 | Literature-Based Research | 3 | 0 | 3 |

### B. Humanities/Fine Arts

| COM 231 | Public Speaking | 3 | 0 | 3 |
|---|---|---|---|---|

**Select one of the following courses:**

| ENG 232 | American Literature II | 3 | 0 | 3 |
|---|---|---|---|---|
| ENG 233 | Major American Writers | 3 | 0 | 3 |
| ENG 241 | British Literature I | 3 | 0 | 3 |
| ENG 242 | British Literature II | 3 | 0 | 3 |
| ENG 251 | Western World Literature I | 3 | 0 | 3 |
| ENG 252 | Western World Literature II | 3 | 0 | 3 |
| ENG 261 | World Literature I | 3 | 0 | 3 |
| ENG 262 | World Literature II | 3 | 0 | 3 |

**The following courses are required:**

| HUM 120 | Cultural Studies | 3 | 0 | 3 |
|---|---|---|---|---|
| HUM 211 | Humanities I | 3 | 0 | 3 |

Note: ACA 115, Success and Study Skills, 0-2-1, required in all two-year programs, should be completed as soon as possible.

## II. Other Required Hours

At certain UNC institutions, EDU 116 may fulfill a major requirement; at a majority of institutions it will transfer only as a free elective.

It is recommended that within the 20 semester hours of "Other Required Hours," pre-education students in Technology Education select courses that will help meet the mandated academic (second major) concentration. These courses should be selected in conjunction with the requirements at each university, since academic (second major) concentrations differ on each campus. Typically offered academic courses in these concentrations may be taken as general education or as "Other Required Hours."

**Recommended Courses for Typical Academic Concentration:**

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| | | | **HOURS** | | |

**Biology: Select up to 12 semester hours:**

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| BIO | 111 | General Biology I | 3 | 3 | 4 |
| BIO | 112 | General Biology II | 3 | 3 | 4 |
| BIO | 120 | Introductory Botany | 3 | 3 | 4 |
| BIO | 130 | Introductory Zoology | 3 | 3 | 4 |
| CHM | 151 | General Chemistry I | 3 | 3 | 4 |
| CHM | 152 | General Chemistry II | 3 | 3 | 4 |

**English: Select up to 6 semester hours:**

| | | | | | |
|---|---|---|---|---|---|
| ENG | 231 | American Literature I | 3 | 0 | 3 |
| ENG | 232 | American Literature II | 3 | 0 | 3 |
| ENG | 241 | British Literature I | 3 | 0 | 3 |
| ENG | 242 | British Literature II | 3 | 0 | 3 |
| ENG | 261 | World Literature I | 3 | 0 | 3 |
| ENG | 262 | World Literature II | 3 | 0 | 3 |
| ENG | 272 | Southern Literature | 3 | 0 | 3 |

**History**

| | | | | | |
|---|---|---|---|---|---|
| HIS | 111 | World Civilizations I | 3 | 0 | 3 |
| HIS | 112 | World Civilizations II | 3 | 0 | 3 |

**Mathematics: Select up to 12 semester hours:**

| | | | | | |
|---|---|---|---|---|---|
| MAT | 151 | Statistics I | 3 | 0 | 3 |
| MAT | 151A | Statistics I Lab | 0 | 2 | 1 |
| MAT | 271 | Calculus I | 3 | 2 | 4 |
| MAT | 272 | Calculus II | 3 | 2 | 4 |

**Psychology: Select hours from the following:**

| | | | | | |
|---|---|---|---|---|---|
| PSY | 150 | General Psychology | 3 | 0 | 3 |
| PSY | 239 | Psychology of Personality | 3 | 0 | 3 |
| PSY | 241 | Developmental Psychology | 3 | 0 | 3 |
| PSY | 243 | Child Psychology | 3 | 0 | 3 |
| PSY | 281 | Abnormal Psychology | 3 | 0 | 3 |

## III. Physical Education

**Select one hour from the following courses:**

PED 110; PED 111; PED 112; PED 113; PED 114; PED 115; PED 116; PED 117; PED 118; PED 119; PED 125; PED 126; PED 128; PED 129; PED 130; PED 131; PED 141; PED 142; PED 143; PED 144; PED 145; PED 146; PED 147; PED 148; PED 150; PED 151; PED 170; PED 171; PED 172; PED 173; PED 174; PED 240; PED 250; PED 251; PED 252; PED 254; PED 255; PED 256

## TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 64-65

**Students must meet the receiving university's foreign language and physical education requirement, if applicable, before or after transfer to the four-year institution.**

# ASSOCIATE IN SCIENCE DEGREE

## I. General Education (44 Semester Hour Core)

|  |  |  | HOURS | | |
|---|---|---|---|---|---|
|  |  |  | CLASS | LAB | CREDIT |

### A. Composition (6 Semester Hours)

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| ENG | 113 | Literature-Based Research | 3 | 0 | 3 |

### B. Humanities /Fine Arts

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| COM | 231 | Public Speaking | 3 | 0 | 3 |

**Select two courses from the following:**

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| ART | 111 | Art Appreciation | 3 | 0 | 3 |
| DRA | 111 | Theatre Appreciation | 3 | 0 | 3 |
| MUS | 110 | Music Appreciation | 3 | 0 | 3 |

Foreign language lecture and lab are considered one course.

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| SPA | 111 | Elementary Spanish I | 3 | 0 | 3 |
| SPA | 181 | Spanish Lab I | 0 | 2 | 1 |
| SPA | 112 | Elementary Spanish II | 3 | 0 | 3 |
| SPA | 182 | Spanish Lab II | 0 | 2 | 1 |
| SPA | 211 | Intermediate Spanish I | 3 | 0 | 3 |
| SPA | 281 | Spanish Lab III | 0 | 2 | 1 |
| SPA | 212 | Intermediate Spanish II | 3 | 0 | 3 |
| SPA | 282 | Spanish Lab IV | 0 | 2 | 1 |
| PHI | 210 | History of Philosophy | 3 | 0 | 3 |
| REL | 211 | Intro to Old Testament | 3 | 0 | 3 |
| REL | 212 | Intro to New Testament | 3 | 0 | 3 |
| REL | 110 | World Religions | 3 | 0 | 3 |
| REL | 221 | Religion in America | 3 | 0 | 3 |
| REL | 111 | Eastern Religions | 3 | 0 | 3 |
| REL | 112 | Western Religions | 3 | 0 | 3 |

**Select at least one course from the following:**

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| ENG | 231 | American Literature I | 3 | 0 | 3 |
| ENG | 232 | American Literature II | 3 | 0 | 3 |
| ENG | 233 | Major American Writers | 3 | 0 | 3 |
| ENG | 241 | British Literature I | 3 | 0 | 3 |
| ENG | 242 | British Literature II | 3 | 0 | 3 |
| ENG | 251 | Western World Literature I | 3 | 0 | 3 |
| ENG | 252 | Western World Literature II | 3 | 0 | 3 |
| ENG | 261 | World Literature I | 3 | 0 | 3 |
| ENG | 262 | World Literature II | 3 | 0 | 3 |

### C. Social Sciences

**Select two courses from the following:**

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| HIS | 111 | World Civilizations I | 3 | 0 | 3 |
| HIS | 112 | World Civilizatins II | 3 | 0 | 3 |

|  |  |  | **HOURS** | | |
|---|---|---|---|---|---|
|  |  |  | **CLASS** | **LAB** | **CREDIT** |
| HIS | 131 | American History I | 3 | 0 | 3 |
| HIS | 132 | American History II | 3 | 0 | 3 |

**Select two courses from the following:**

|  |  |  |  |  |  |
|---|---|---|---|---|---|
| POL | 120 | American Government | 3 | 0 | 3 |
| PSY | 150 | General Psychology | 3 | 0 | 3 |
| SOC | 210 | Intro to Sociology | 3 | 0 | 3 |

**D. Natural Sciences**

**Select one of the following sequences:**

|  |  |  |  |  |  |
|---|---|---|---|---|---|
| BIO | 111 | General Biology I | 3 | 3 | 4 |
| BIO | 112 | General Biology II | 3 | 3 | 4 |
| CHM | 151 | General Chemistry I | 3 | 3 | 4 |
| CHM | 152 | General Chemistry II | 3 | 3 | 4 |
| PHY | 151 | College Physics I | 3 | 2 | 4 |
| PHY | 152 | College Physics II | 3 | 2 | 4 |
| GEL | 111 | Introductory Geology | 3 | 2 | 4 |
| GEL | 120 | Physical Geology | 3 | 2 | 4 |

**E. Mathematics and Computer Science**

|  |  |  |  |  |  |
|---|---|---|---|---|---|
| MAT | 161 | College Algebra | 3 | 0 | 3 |
| CIS | 110 | Intro to Computers | 2 | 2 | 3 |

Note: ACA 115, Success and Study Skills, 0-2-1, should be completed as soon as possible.

**II. Other Required Hours**

**Select 14 hours from the following courses:**

|  |  |  |  |  |  |
|---|---|---|---|---|---|
| MAT | 140 | Survey of Mathematics | 3 | 0 | 3 |
| MAT | 141 | Math I for Teachers/K-9 | 3 | 0 | 3 |
| MAT | 142 | Math II for Teachers/K-9 | 3 | 0 | 3 |
| MAT | 151 | Statistics I | 3 | 0 | 3 |
| MAT | 151A | Statistics I Lab | 0 | 2 | 1 |
| MAT | 162 | College Trigonometry | 3 | 0 | 3 |
| MAT | 171 | Precalculus Algebra | 3 | 0 | 3 |
| MAT | 172 | Precalculus Trigonometry | 3 | 0 | 3 |
| MAT | 175 | Precalculus | 4 | 0 | 4 |
| MAT | 271 | Calculus I | 3 | 2 | 4 |
| MAT | 272 | Calculus II | 3 | 2 | 4 |

## III. Other Electives

Select 6 hours from the following courses:

Courses counted as core courses may not be counted again as elective hours.

ACC 120; ACC 121; ART 111; ART 113; ART 114; ART 115; ART 116; ART 121; ART 122; ART 130; ART 131; ART 140; ART 212; ART 213; ART 132; ART 231; ART 240; ART 241; ART 288; BIO 120; BIO 130; BUS 110; CHM 151; CHM 152; CSC 134; DRA 124; DRA 128; DRA 111; ECO 251; EC0 252; EDU 116; ENG 125; ENG 126; ENG 131; ENG 231; ENG 232; ENG 233; ENG 241; ENG 242; ENG 251; ENG 252; ENG 261; ENG 262; ENG 272; GEO 111; HEA 110; HEA 111; HEA 120; HIS 111; HIS 112; HIS 131; HIS 132; HIS 228; HIS 229; HUM 120; HUM 122; HUM 170; HUM 211; MAT 140; MAT 141; MAT 142; MAT 151; MAT 151A; MAT 162; MAT 171; MAT 172; MAT 175; MAT 271; MAT 272; MUS 110; PED 110; PED 111; PED 112; PED 113; PED 114; PED 115; PED 116; PED 117; PED 118; PED 119; PED 125; PED 126; PED 128; PED 129; PED 130; PED 131; PED 141; PED 142; PED 143; PED 144; PED 145; PED 146; PED 147; PED 148; PED 150; PED 151; PED 170; PED 171; PED 172; PED 173; PED 174; PED 240; PED 250; PED 251; PED 252; PED 254; PED 255; PED 256; PHI 210; PHI 240; PHY 131; PHY 151; PHY 152; PHY 251; PHY 252; POL 120; POL 220; PSY 150; PSY 239; PSY 241; PSY 243; PSY 281; SOC 210; SOC 213; SOC 220; SOC 225; SPA 111; SPA 181; SPA 112; SPA 182; SPA 211; SPA 281; SPA 212; SPA 282

### TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 64-65

Students must meet the receiving university's foreign language and physical education requirement, if applicable, before or after transfer to the four-year institution.

# PRE-BIOLOGY AND BIOLOGY EDUCATION (AS)

## I. General Education (44 Semester Hour Core)

| | | | HOURS | | |
|---|---|---|---|---|---|
| | | | CLASS | LAB | CREDIT |

### A. Composition (6 Semester Hours)

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| ENG | 113 | Literature-Based Research | 3 | 0 | 3 |

### B. Humanities/Fine Arts

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| COM | 231 | Public Speaking | 3 | 0 | 3 |

**Select at least two courses from the following:**

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| ART | 111 | Art Appreciation | 3 | 0 | 3 |
| MUS | 110 | Music Appreciation | 3 | 0 | 3 |

Foreign language lecture and lab are considered one courses.

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| SPA | 111 | Elementary Spanish I | 3 | 0 | 3 |
| SPA | 181 | Spanish Lab I | 0 | 2 | 1 |
| SPA | 112 | Elementary Spanish II | 3 | 0 | 3 |
| SPA | 182 | Spanish Lab II | 0 | 2 | 1 |
| REL | 110 | World Religions | 3 | 0 | 3 |
| REL | 221 | Religion in America | 3 | 0 | 3 |
| REL | 111 | Eastern Religions | 3 | 0 | 3 |
| REL | 112 | Western Religions | 3 | 0 | 3 |
| REL | 211 | Intro to Old Testament | 3 | 0 | 3 |
| REL | 212 | Intro to New Testament | 3 | 0 | 3 |

**Select one course from the following:**

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| ENG | 231 | American Literature I | 3 | 0 | 3 |
| ENG | 232 | American Literature II | 3 | 0 | 3 |
| ENG | 233 | Major American Writers | 3 | 0 | 3 |
| ENG | 241 | British Literature I | 3 | 0 | 3 |
| ENG | 242 | British Literature II | 3 | 0 | 3 |
| ENG | 251 | Western World Literature I | 3 | 0 | 3 |
| ENG | 252 | Western World Literature II | 3 | 0 | 3 |
| ENG | 261 | World Literature I | 3 | 0 | 3 |
| ENG | 262 | World Literature II | 3 | 0 | 3 |

### C. Social Sciences

**Select three courses from the following: (One course must be HIS 111 or HIS 112.)**

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| PSY | 150 | General Psychology | 3 | 0 | 3 |
| HIS | 111 | World Civilizations I | 3 | 0 | 3 |
| HIS | 112 | World Civilizations II | 3 | 0 | 3 |

| | | | HOURS | | |
|---|---|---|---|---|---|
| | | | **CLASS** | **LAB** | **CREDIT** |
| POL | 120 | American Government | 3 | 0 | 3 |
| SOC | 210 | Intro to Sociology | 3 | 0 | 3 |
| SOC | 213 | Sociology fo the Family | 3 | 0 | 3 |
| SOC | 220 | Social Problems | 3 | 0 | 3 |
| SOC | 225 | Social Diversity | 3 | 0 | 3 |
| PSY | 239 | Psychology of Personality | 3 | 0 | 3 |
| PSY | 241 | Developmental Psychology | 3 | 0 | 3 |
| PSY | 281 | Abnormal Psychology | 3 | 0 | 3 |

**D. Natural Sciences**

| | | | | | |
|---|---|---|---|---|---|
| CHM | 151 | General Chemistry I | 3 | 3 | 4 |
| CHM | 152 | General Chemistry II | 3 | 3 | 4 |

**E. Mathematics and Computer Science**

| | | | | | |
|---|---|---|---|---|---|
| CIS | 110 | Intro to Computers | 2 | 2 | 3 |
| MAT | 171 | Precalculus Algebra | 3 | 0 | 3 |

Note: ACA 115, Success and Study Skills, 0-2-1, required in all two-year programs, should be taken early in the program.

**II. Other Required Courses**

| | | | | | |
|---|---|---|---|---|---|
| BIO | 111 | General Biology I | 3 | 3 | 4 |
| PHY | 151 | College Physics I | 3 | 2 | 4 |
| PHY | 152 | College Physics II | 3 | 2 | 4 |

**Select two courses from the following:**

| | | | | | |
|---|---|---|---|---|---|
| BIO | 112 | General Biology II | 3 | 3 | 4 |
| BIO | 120 | Introductory Botany | 3 | 3 | 4 |
| BIO | 130 | Introductory Zoology | 3 | 3 | 4 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 64-65**

**Students must meet the receiving university's foreign language and physical education requirement, if applicable, before or after transfer to the four-year institution.**

# PRE-ENGINEERING (AS)

## I. General Education (44 Semester Hour Core)

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| | | | **HOURS** | | |

### A. Composition

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| ENG | 113 | Literature-Based Research | 3 | 0 | 3 |

### B. Humanities/Fine Arts

| | | | | | |
|---|---|---|---|---|---|
| COM | 231 | Public Speaking | 3 | 0 | 3 |

**Select two of the following courses:**

| | | | | | |
|---|---|---|---|---|---|
| ART | 111 | Art Appreciation | 3 | 0 | 3 |
| MUS | 110 | Music Appreciation | 3 | 0 | 3 |

Foreign language lectures and lab are considered one course.

| | | | | | |
|---|---|---|---|---|---|
| SPA | 111 | Elementary Spanish I | 3 | 0 | 3 |
| SPA | 181 | Spanish Lab I | 0 | 2 | 1 |
| SPA | 112 | Elementary Spanish II | 3 | 0 | 3 |
| SPA | 182 | Spanish lab II | 0 | 2 | 1 |
| REL | 110 | World Religions | 3 | 0 | 3 |
| REL | 221 | Religion in America | 3 | 0 | 3 |
| REL | 211 | Intro to Old Testament | 3 | 0 | 3 |
| REL | 212 | Intro to New Testament | 3 | 0 | 3 |
| REL | 111 | Eastern Religions | 3 | 0 | 3 |
| REL | 112 | Western Religions | 3 | 0 | 3 |

**Select one of the following courses:**

| | | | | | |
|---|---|---|---|---|---|
| ENG | 231 | American Literature I | 3 | 0 | 3 |
| ENG | 232 | American Literature II | 3 | 0 | 3 |
| ENG | 233 | Major American Writers | 3 | 0 | 3 |
| ENG | 241 | British Literature I | 3 | 0 | 3 |
| ENG | 242 | British Literature II | 3 | 0 | 3 |
| ENG | 251 | Western World Literature I | 3 | 0 | 3 |
| ENG | 252 | Western World Literature II | 3 | 0 | 3 |
| ENG | 261 | World Literature I | 3 | 0 | 3 |
| ENG | 262 | World Literature II | 3 | 0 | 3 |

### C. Social Sciences

| | | | | | |
|---|---|---|---|---|---|
| HIS | 111 | World Civilizations I | 3 | 0 | 3 |
| HIS | 112 | World Civilizations II | 3 | 0 | 3 |
| PSY | 150 | General Psychology | 3 | 0 | 3 |

**Select one additional course:**

| | | | | | |
|---|---|---|---|---|---|
| ECO | 251 | Principles of Microeconomics | 3 | 0 | 3 |
| ECO | 252 | Principles of Macroeconomics | 3 | 0 | 3 |

| | | | HOURS | | |
|---|---|---|---|---|---|
| | | | **CLASS** | **LAB** | **CREDIT** |

**D. Natural Sciences**

| | | | | | |
|---|---|---|---|---|---|
| PHY | 251 | General Physics I | 3 | 3 | 4 |
| PHY | 252 | General Physics II | 3 | 3 | 4 |

**E. Mathematics**

| | | | | | |
|---|---|---|---|---|---|
| MAT | 271 | Calculus I | 3 | 2 | 4 |
| MAT | 272 | Calculus II | 3 | 2 | 4 |

Note: ACA 115, Success and Study Skills, 0-2-1, should be completed as early as possible.

**II. Other Required Hours**

| | | | | | |
|---|---|---|---|---|---|
| CHM | 151 | General Chemistry I | 3 | 3 | 4 |
| CHM | 152 | General Chemistry II | 3 | 3 | 4 |
| MAT | 273 | Calculus III | 3 | 2 | 4 |
| MAT | 285 | Differential Equations | 3 | 0 | 3 |
| CSC | 134 | C++ Programming | 2 | 3 | 3 |

**III. Select one of the following physical education courses:**

PED 110; PED 111; PED 112; PED 113; PED 114; PED 115; PED 116; PED 117; PED 118; PED 119; PED 125; PED 126; PED 128; PED 129; PED 130; PED 131; PED 141; PED 142; PED 143; PED 144; PED 145; PED 146; PED 147; PED 148; PED 150; PED 151; PED 170; PED 171; PED 172; PED 173; PED 174; PED 240; PED 250; PED 251; PED 252; PED 254; PED 255; PED 256

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 64-65**

**Students must meet the receiving university's foreign language and physical education requirement, if applicable, before or after transfer to the four-year institution.**

# TECHNICAL AND GENERAL PROGRAMS

## ASSOCIATE IN GENERAL EDUCATION DEGREE

| I. Core Program | | HOURS | | |
|---|---|---|---|---|
| | | CLASS | LAB | CREDIT |
| **A. Composition** | | | | |
| ENG 111 | Expository Writing | 3 | 0 | 3 |
| **Select one of the following courses:** | | | | |
| ENG 112 | Argument-Based Research | 3 | 0 | 3 |
| ENG 113 | Literature-Based Research | 3 | 0 | 3 |
| **B. Humanities/Fine Arts** | | | | |
| **Select one course from the following:** | | | | |
| ART 111 | Art Appreciation | 3 | 0 | 3 |
| DRA 111 | Theatre Appreciation | 3 | 0 | 3 |
| MUS 110 | Music Appreciation | 3 | 0 | 3 |
| PHI 210 | History of Philosophy | 3 | 0 | 3 |
| REL 210 | World Religions | 3 | 0 | 3 |
| REL 211 | Intro to Old Testament | 3 | 0 | 3 |
| REL 212 | Intro to New Testament | 3 | 0 | 3 |
| REL 221 | Religion in America | 3 | 0 | 3 |
| ENG 231 | American Literature I | 3 | 0 | 3 |
| ENG 232 | American Literature II | 3 | 0 | 3 |
| ENG 233 | Major American Writers | 3 | 0 | 3 |
| ENG 241 | British Literature I | 3 | 0 | 3 |
| ENG 242 | British Literature II | 3 | 0 | 3 |
| ENG 251 | Western World Literature I | 3 | 0 | 3 |
| ENG 252 | Western World Literature II | 3 | 0 | 3 |
| ENG 261 | World Literature I | 3 | 0 | 3 |
| ENG 262 | World Literature II | 3 | 0 | 3 |
| **C. Social Sciences** | | | | |
| **Select one course from the following:** | | | | |
| HIS 111 | World Civilizations I | 3 | 0 | 3 |
| HIS 112 | World Civilizations II | 3 | 0 | 3 |
| HIS 131 | American History I | 3 | 0 | 3 |
| HIS 132 | American History II | 3 | 0 | 3 |
| PSY 150 | General Psychology | 3 | 0 | 3 |
| SOC 210 | Introduction Sociology | 3 | 0 | 3 |
| GEO 111 | World Regional Geography | 3 | 0 | 3 |
| POL 120 | American Government | 3 | 0 | 3 |

## II.  Natural Sciences/Mathematics

### Select one mathematics course or one science course from the following:

| | | | | | |
|---|---|---|---|---|---|
| BIO | 111 | General Biology I | 3 | 3 | 4 |
| BIO | 112 | General Biology II | 3 | 3 | 4 |
| CHM | 151 | General Chemistry I | 3 | 3 | 4 |
| CHM | 152 | General Chemistry II | 3 | 3 | 4 |
| PHY | 151 | College Physics I | 3 | 2 | 4 |
| PHY | 152 | College Physics II | 3 | 2 | 4 |
| GEL | 111 | Introductory Geology | 3 | 2 | 4 |
| GEL | 120 | Physical Geology | 3 | 2 | 4 |
| MAT | 140 | Survey of Mathematics | 3 | 0 | 3 |
| MAT | 141 | Math I for Teachers/K-9 | 3 | 0 | 3 |
| MAT | 142 | Math II for Teachers/K-9 | 3 | 0 | 3 |
| MAT | 151 | Statistics I | 3 | 0 | 3 |
| MAT | 151A | Statistics I Lab | 0 | 2 | 1 |
| MAT | 162 | College Trigonometry | 3 | 0 | 3 |
| MAT | 171 | Precalculus Algebra | 3 | 0 | 3 |
| MAT | 172 | Precalculus Trigonometry | 3 | 0 | 3 |
| MAT | 175 | Precalculus | 4 | 0 | 4 |
| MAT | 271 | Calculus I | 3 | 2 | 4 |
| MAT | 272 | Calculus II | 3 | 2 | 4 |

## III.  Other Required Hours

| | | | | | |
|---|---|---|---|---|---|
| ACA | 115 | Success and Study Skills | 0 | 2 | 1 |
| CIS | 110 | Introduction to Computers | 3 | 0 | 3 |

### Select one of the following physical education courses:

PED 110; PED 111; PED 112; PED 113; PED 114; PED 115; PED 116; PED 117; PED 118; PED 119; PED 125; PED 126; PED 128; PED 129; PED 130; PED 131; PED 141; PED 142; PED 143; PED 144; PED 145; PED 146; PED 147; PED 148; PED 150; PED 151; PED 170; PED 171; PED 172; PED 173; PED 174; PED 240; PED 250; PED 251; PED 252; PED 254; PED 255; PED 256

### Select 44-45 hours from the following courses:

ACC 120; ACC 121; ART 111; ART 113; ART 114; ART 115; ART 116; ART 121; ART 122; ART 130; ART 131; ART 140; ART 212; ART 213; ART 132; ART 231; ART 240; ART 241; ART 288; BIO 120; BIO 130; BUS 110; CHM 151; CHM 152; CSC 134; DRA 124; DRA 128; DRA 111; ECO 251; EC0 252; EDU 116; ENG 125; ENG 126; ENG 131; ENG 231; ENG 232; ENG 233; ENG 241; ENG 242; ENG 251; ENG 252; ENG 261;

ENG 262; ENG 272; GEO 111; HEA 110; HEA 111; HEA 120; HIS 111; HIS 112; HIS 131; HIS 132; HIS 228; HIS 229; HUM 120; HUM 122; HUM 170; HUM 211; MAT 140; MAT 141; MAT 142; MAT 151; MAT 151A; MAT 162; MAT 171; MAT 172; MAT 175; MAT 271; MAT 272; MUS 110; PED 110; PED 111; PED 112; PED 113; PED 114; PED 115; PED 116; PED 117; PED 118; PED 119; PED 125; PED 126; PED 128; PED 129; PED 130; PED 131; PED 141; PED 142; PED 143; PED 144; PED 145; PED 146; PED 147; PED 148; PED 150; PED 151; PED 170; PED 171; PED 172; PED 173; PED 174; PED 240; PED 250; PED 251; PED 252; PED 254; PED 255; PED 256; PHI 210; PHI 240; PHY 131; PHY 151; PHY 152; PHY 251; PHY 252; POL 120; POL 220; PSY 150; PSY 239; PSY 241; PSY 243; PSY 281; SOC 210; SOC 213; SOC 220; SOC 225; SPA 111; SPA 181; SPA 112; SPA 182; SPA 211; SPA 281; SPA 212; SPA 282

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 64-65**

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN ACCOUNTING (AAS)

The Accounting curriculum is designed to provide students with the knowledge and the skills necessary for employment and growth in the accounting profession. Using the "language of business," accountants assemble and analyze, process, and communicate essential information about financial operations.

In addition to course work in accounting principles, theories, and practice, students will study business law, finance, management, and economics. Related skills are developed through the study of communications, computer applications, financial analysis, critical thinking skills, and ethics.

Graduates should qualify for entry-level accounting positions in many types of organizations including accounting firms, small businesses, manufacturing firms, banks, hospitals, school systems, and governmental agencies. With work experience and additional education, an individual may advance in the accounting profession.

# ASSOCIATE IN APPLIED SCIENCE DEGREE IN ACCOUNTING (AAS)

## Course and Hour Requirements

| Major Courses | | Credit Hours |
|---|---|---|
| ACC | 120 | 4 |
| ACC | 121 | 4 |
| ACC | 220 | 4 |
| ACC | 221 | 4 |
| ACC | 225 | 3 |
| BUS | 115 | 3 |
| ACC | 129 | 3 |
| ECO | 251 | 3 |
| CIS | 110 | 3 |
| ACC | 269 | 3 |
| BUS | 121 | 3 |
| BUS | 225 | 3 |
| ECO | 252 | 3 |
| ACC | 149 | 2 |
| ACC | 150 | 2 |
| CIS | 120 | 3 |

**Total Major Hours: 50**

| General Education Courses | | Credit Hours |
|---|---|---|
| **Communications:** | | |
| ENG | 111 | 3 |
| ENG | 112 | 3 |
| COM | 231 | 3 |
| | | |
| **Humanities/Fine Arts: Select one** | | |
| ART | 111 | 3 |
| ENG | 231 | 3 |
| ENG | 232 | 3 |
| ENG | 233 | 3 |
| ENG | 241 | 3 |
| ENG | 242 | 3 |
| HUM | 122 | 3 |
| HUM | 170 | 3 |
| HUM | 211 | 3 |
| MUS | 110 | 3 |
| PHI | 210 | 3 |
| PHI | 240 | 3 |
| REL | 211 | 3 |
| REL | 212 | 3 |
| REL | 221 | 3 |
| | | |
| **Social/Behavioral Science: Select one** | | |
| PSY | 150 | 3 |
| SOC | 210 | 3 |
| | | |
| **Natural Science/Mathematics** | | |
| MAT | 161 | 3 |

**Total General Education Hours: 18**

**Other Required Courses**

| ACA | 115 | 1 |
|---|---|---|

**Total Other Required Hours: 1**

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 69**

# ASSOCIATE IN APPLIED SCIENCE DEGREE IN ACCOUNTING (AAS)

## Suggested Sequence of Courses

### FIRST YEAR
#### FALL SEMESTER

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| ACC | 120 | Principles of Accounting I | 3 | 2 | 4 |
| CIS | 110 | Introduction to Computers | 2 | 2 | 3 |
| MAT | 161 | College Algebra | 3 | 0 | 3 |
| BUS | 121 | Business Math | 2 | 2 | 3 |
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| ACA | 115 | Success and Study Skills | 0 | 2 | 1 |
| | | | 13 | 8 | 17 |

#### SPRING SEMESTER

| | | | | | |
|---|---|---|---|---|---|
| ENG | 112 | Argument-Based Research | 3 | 0 | 3 |
| ACC | 129 | Individual Income Taxes | 2 | 2 | 3 |
| ACC | 121 | Principles of Accounting II | 3 | 2 | 4 |
| CIS | 120 | Spreadsheet I | 2 | 2 | 3 |
| BUS | 225 | Business Finance | 2 | 2 | 3 |
| | | | 12 | 8 | 16 |

### SECOND YEAR
#### FALL SEMESTER

| | | | | | |
|---|---|---|---|---|---|
| ACC | 220 | Intermediate Accounting I | 3 | 2 | 4 |
| ACC | 225 | Cost Accounting | 3 | 0 | 3 |
| ECO | 251 | Principles of Microeconomics | 3 | 0 | 3 |
| ACC | 149 | Intro to Acc Spreadsheets | 1 | 2 | 2 |
| COM | 231 | Public Speaking | 3 | 0 | 3 |
| | | Social Science Elective | 3 | 0 | 3 |
| | | | 16 | 4 | 18 |

#### SPRING SEMESTER

| | | | | | |
|---|---|---|---|---|---|
| ACC | 221 | Intermediate Accounting II | 3 | 2 | 4 |
| ECO | 252 | Principles of Macroeconomics | 3 | 0 | 3 |
| ACC | 269 | Auditing | 3 | 0 | 3 |
| BUS | 115 | Business Law I | 3 | 0 | 3 |
| ACC | 150 | Computerized General Ledger | 1 | 2 | 2 |
| | | Humanities Elective | 3 | 0 | 3 |
| | | | 16 | 4 | 18 |

## TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 69

# ASSOCIATE IN APPLIED SCIENCE DEGREE IN ASSOCIATE DEGREE NURSING (AAS) (REGISTERED NURSING)

The Associate Degree Nursing (non-integrated) curriculum provides individuals with the knowledge and skills necessary to provide nursing care to clients and groups of clients throughout the lifespan in a variety of settings.

Courses will include content related to the nurse's role as provider of nursing care, as manager of care, as member of the discipline of nursing, and as a member of the interdisciplinary team.

Graduates of this program are eligible to apply to take the National Council Licensure Examination (NCLEX-R) which is required for practice as a Registered Nurse. Employment opportunities include hospitals, long term care facilities, clinics, physician's offices, industry, and community agencies.

## ADMISSION AND PROGRAM REQUIREMENTS

Courses required to meet graduation requirements in this program are offered during daytime hours.

Graduates of this program will be awarded the Associate in Applied Science Degree in Nursing.

## ADMISSION PROCESS - First (Year) Level

All materials must be sent to the Admissions Office of the respective college.

The following requirements must be met **before** applicants will be considered for admission to the ADN program.

1. Complete application.
2. Provide official high school transcript or GED scores.
3. Submit an official transcript(s) from **all** colleges attended. Each transcript must reflect a 2.0 cumulative grade point average on courses accepted for transfer credit.
4. Submit three (3) references (not relatives or close friends). Example: teachers, employers, guidance counselors. **References that are not more than two years old at the time of the general admission requirement deadline will be acceptable.** (Applicants must use forms provided.)
5. Complete placement tests which will be administered at the college. Applicants will be informed of the time and place for the tests. The placement tests consists of reading, English/writing skills, numerical skills and algebra (4 tests).
6. Satisfactorily complete all developmental courses required as a result of placement tests with a grade of "S," "C," or higher.
7. Prerequisite courses: Applicants are required to have completed courses in algebra, chemistry, and biology in high school (complete high school unit) or college with a grade of "C" or higher. If applicants have not taken courses, they must complete them in **college** with a

grade of "C" or higher **before** consideration for admission. Algebra may be required from placement scores, even if a high school or college algebra course was successful. Prerequisite courses are not accepted from the Adult High School Diploma Program unless the student is a graduate of the program.

**You are responsible for making sure that these requirements have been met and that all materials have been received by the Admissions Office. Admission requirements currently in effect must be completed.**

**Completion of these requirements will not guarantee admission to the program.**

## SELECTION PROCESS

8. All seven general admission requirements must be met.
9. If notified by the Admissions Office, eligible applicants report for the PSB-Nursing Aptitude Examination-RN. The health form will be provided with the letter of notification for the PSB-RN examination. There is a fee charged for the Aptitude test.
10. If indicated, an interview will be scheduled with an admissions counselor and the nursing director/faculty.
11. Final selection for admission is based on a review of the candidate's academic record, test results, interview responses and favorable results of a physical and emotional examinations. Examination forms are provided by the College. Written notification of acceptance will be sent by the Admissions Office and the ADN director.

All students accepted into the Associate Degree Nursing program are required to have health insurance.

All students must provide proof of cardiopulmonary resuscitation (CPR) certification on the first day of class, fall semester.

Required Courses: Students may take general/related (non-nursing) courses before acceptance in the nursing program.

Completion of these courses will help prepare but not guarantee admission into the program.

Persons admitted to the ADN program are eligible to take the National Council Licensure Examination (NCLEX-RN) which is required to practice as a registered nurse.

Enrollment in the Associate Degree Nursing program is limited. Applicants are advised to apply early.

All applications must be updated annually. If one has applied previously, he or she must initiate the process again, including PSB-Nursing Aptitude Exam retesting.

If there are any questions, contact the Admissions Office at the respective college.

## ADMISSION REQUIREMENTS - Second (year) Level

All materials must be sent to the Admissions Office of the respective college.

The following requirements must be met **before** applicants will be considered for admission to the ADN program.

1. Complete application.
2. Provide official high school transcript or GED scores.
3. Submit an official transcript(s) from **all** colleges attended. Each transcript must reflect a 2.0 cumulative grade point average on courses accepted for transfer credit.
4. Complete placement tests which will be administered at the college. Applicants will be informed of the time and place for the tests. The placement tests consists of reading, English/writing skills, numerical skills and algebra (4 tests). Placement tests are required now.
5. Satisfactorily complete all developmental courses required as a result of placement tests with a grade of "S," "C," or higher.
6. Prerequisite courses: You are required to have completed courses in algebra, chemistry, and biology in high school (complete high school unit) or college with a grade of "C" or better. If applicants have not taken classes, they must complete them in **college** with a grade of "C" or higher **before** consideration for admission. Algebra may be required from placement test scores, even if a high school or college algebra course was successful.

   *Advance placement students who have completed non-college anatomy and physiology in a practical nurse program, with a grade of "C" or above, will be exempt from a prerequisite biology course.
7. Submit official copy of college, practical nursing or other nursing program transcripts (course syllabi may be required).
8. Submit evidence of current unrestricted license as a practical nurse in the state of North Carolina. The unrestricted license must also be current at the time of acceptance into the program.
9. Submit (3) three references (not relatives or close friends), one of which must be a work reference if applicable. Example: teachers, employers, counselors. References that are not more than two years old at the time of the general admission requirement deadline will be acceptable. (Applicants must use forms provided.)
10. First year non-nursing courses (general/related) and Anatomy and Physiology II must be in progress if series is not completed.

**You are responsible for making sure that these requirements have been met and that all materials have been received by the Admissions Office. Admission requirements currently in effect must be completed.**

**Completion of these requirements will not guarantee admission to the program.**

## SELECTION PROCESS AND REQUIREMENTS

11. The above criteria must be met to be eligible to take the challenge exam.
12. Report for the challenge exam when notified by the Admissions Office. A fee is charged for the exam.
13. If eligible the Admissions Office will notify students to report for the PSB-Nursing School aptitude Examination R.N. A fee is charged for the Aptitude exam.
14. If indicated, an interview will be scheduled with an admissions counselor and the Nursing Director/Faculty.
15. If eligible, applicants will be notified of when and where to register for the nursing transition course (NUR 100). Health forms will be provided with notification to register for NUR 100.
16. LPN's must complete the nursing role transition course NUR 100 with a grade of "C" or above prior to summer admission. Anatomy and Physiology III may be taken with NUR 100.
17. Before summer admission, applicants must complete the following first year non-nursing courses with a grade of "C" or above:
    BIO 165   ENG 113
    BIO 166   HUM 211
    BIO 175   PSY 150
    ENG 111   PSY 241
18. Final selection for admission is based on a review of the candidate's academic record, test results, interview responses and favorable results of the physical and emotional examinations. NUR 100 must also be completed with a grade of "C" or higher. Written notifications of acceptance will be sent by the Admissions Officer and the ADN Director.

## APPLICATION DECISION PROCESS FOR FIRST- AND SECOND-YEAR APPLICANTS

Prospective nursing candidates residing in the three-service area counties of North Carolina should apply to their respective colleges. Other applicants may apply to the college of their convenience. Priority will be given to service area applicants first, then other North Carolina residents, then out-of-state residents.

Applications will be accepted as openings occur with priority on the basis of the highest cumulative average on the nursing aptitude exam, the nursing challenge exam, and the interview.

Should openings develop for which no qualified service area applicants are available, priority will be given on the basis of highest scores to qualified applicants from the service areas of the other consortium colleges.*

*Any duplication of scores and completion dates will be resolved on the basis of highest average on prerequisite courses.

Any person completing the admissions requirements and not accepted to the fall or summer class may reapply for admission and request PSB-Nursing School Aptitude Exam-RN retesting the following year. The more recent test score will be used for admission consideration.

Persons reapplying will be considered by the above criteria. Applications must be updated annually.

## INTRA-CONSORTIUM TRANSFER/RE-ENTRY POLICY

1. All requests for re-entry into the nursing program must be approved by the Admissions Director and the Nursing Director prior to implementation.
2. Only one re-entry for course failure will be considered between consortium member college or from other nursing programs.
3. Students must remain with the college of entry during the program regardless of residence.

## STUDENTS DESIRING ADMITTANCE AND TRANSFER OF CREDITS FROM SCHOOLS OUTSIDE THE CONSORTIUM

Students will comply with the following:
1. Completion of the admission requirements as stated in the Admission Policy - Admission for First Year Students, or Advanced Placement Students.
2. Written notification by the student to the Consortium Director and Admissions Director of the desired college of intent to transfer.
3. Submission of transcripts from former nursing program(s) and other post-secondary work for which the student requests transfer credit.
4. Transcripts are evaluated by the designated individual at the institution and the Consortium Director. They determine course eligibility for transfer credit into the nursing curriculum.
5. Completion of Challenge Exams is required if nursing courses submitted for transfer credit are more than two years old as evidenced by the date of completion of the course(s). See Challenge Exam Policy for requirements.
6. Individual consideration will be determined by the circumstances, admission decision process policies and space availability.

Upon completion of the program graduates will be able to:
1. Utilize the nursing process when caring for individuals.
2. Perform technical skills and practice current technology at a safe level.
3. Function in the role of provider of care, manager of care, and member within the discipline of nursing.
4. Function within a variety of health care settings where there is recourse to supervision from a more experienced, better prepared person (nurse) and where procedures and protocols are established.
5. Be accountable and practice within the ethical and legal framework of nursing.

6. Apply principles of the biological, physical, social and behavioral sciences in performing independent, dependent and interdependent nursing functions.
7. Manage nursing care for patients with common, well-defined health problems.

## FOOTHILLS NURSING CONSORTIUM - CURRICULUM PLAN ASSOCIATE IN APPLIED SCIENCE DEGREE IN ASSOCIATE DEGREE NURSING (AAS), REGISTERED NURSING

### Cleveland Community College

### Course and Hour Requirements

| Major Courses | | Credit Hours |
|---|---|---|
| NUR | 115 | 5 |
| NUR | 125 | 8 |
| NUR | 135 | 9 |
| NUR | 185 | 5 |
| NUR | 235 | 10 |
| NUR | 117 | 2 |
| NUR | 133 | 3 |
| NUR | 233 | 2 |
| NUR | 244 | 2 |
| BIO | 155 | 3 |
| or | | |
| NUR | 189 | 2 |

**Total Major Hours: 49**

| General Education Courses | | Credit Hours |
|---|---|---|
| **Communications:** | | |
| ENG | 111 | 3 |
| ENG | 113 | 3 |
| | | |
| **Humanities** | | |
| HUM | 211 | 3 |
| | | |
| **Social/Behavioral Science:** | | |
| PSY | 150 | 3 |
| PSY | 241 | 3 |
| | | |
| **Natural Science:** | | |
| BIO | 165 | 4 |
| BIO | 166 | 4 |
| BIO | 175 | 3 |

**Total General Education Hours: 26**

**Other Required Courses**

| ACA | 115 | 1 |
|---|---|---|

**Total Other Required Hours: 1**

## TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 76

# FOOTHILLS NURSING CONSORTIUM - CURRICULUM PLAN
## ASSOCIATE IN APPLIED SCIENCE DEGREE IN
## ASSOCIATE DEGREE NURSING (AAS), REGISTERED NURSING

## Suggested Sequence of Courses

**FIRST YEAR**

| FALL SEMESTER | | | Class | Lab | Clinical | Credit |
|---|---|---|---|---|---|---|
| NUR | 115 | Fundamentals of Nursing | 2 | 3 | 6 | 5 |
| NUR | 117 | Pharmacology | 1 | 3 | 0 | 2 |
| BIO | 165 | Anatomy and Physiology I | 3 | 3 | 0 | 4 |
| PSY | 150 | General Psychology | 3 | 0 | 0 | 3 |
| ACA | 115 | Success and Study Skills | 0 | 2 | 0 | 1 |
| BIO* | 155 | Nutrition | 3 | 0 | 0 | 3 |
| | | | 12 | 11 | 6 | 18 |

*Generic Students Only

| SPRING SEMESTER | | | | | | |
|---|---|---|---|---|---|---|
| NUR | 135 | Adult Nursing I | 5 | 3 | 9 | 9 |
| NUR | 133 | Nursing Assessment | 2 | 3 | 0 | 3 |
| BIO | 166 | Anatomy and Physiology II | 3 | 3 | 0 | 4 |
| NUR** | 189 | Nursing Transition | (1) | (3) | 0 | 2 |
| | | | 10 | 9 | 9 | 16 |

**LPNs only

| SUMMER TERM | | | | | | |
|---|---|---|---|---|---|---|
| NUR | 185 | Mental Health Nursing | 3 | 0 | 6 | 5 |
| BIO | 175 | General Microbiology | 2 | 2 | 0 | 3 |
| PSY | 241 | Developmental Psychology | 3 | 0 | 0 | 3 |
| ENG | 111 | Expository Writing | 3 | 0 | 0 | 3 |
| | | | 11 | 2 | 6 | 14 |

**SECOND LEVEL**

| FALL SEMESTER | | | | | | |
|---|---|---|---|---|---|---|
| NUR | 125 | Maternal-Child Nursing | 5 | 3 | 6 | 8 |
| NUR | 233 | Leadership in Nursing | 2 | 0 | 0 | 2 |
| ENG | 113 | Literature Research | 3 | 0 | 0 | 3 |
| | | | 10 | 3 | 6 | 13 |

| SPRING SEMESTER | | | | | | |
|---|---|---|---|---|---|---|
| NUR | 235 | Adult Nursing II | 4 | 3 | 15 | 10 |
| NUR | 244 | Issues & Trends | 2 | 0 | 0 | 2 |
| HUM | 211 | Humanities I | 3 | 0 | 0 | 3 |
| | | | 9 | 3 | 15 | 15 |

## TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 76

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN BROADCASTING AND PRODUCTION TECHNOLOGY (AAS)

Students enrolled in the Broadcasting and Production Technology curriculum will develop professional skills in radio, television, audio, video, and related applications.

Training will emphasize speech, script writing, production planning, editing, and post production. Students will also study the development of the broadcasting industry, sales, ethics, law, marketing, and management. Hands-on training and teamwork approaches are essential to the instructional process.

Upon successful completion, students are prepared to enter broadcasting, production, and related industries in a variety of occupations.

# ASSOCIATE IN APPLIED SCIENCE DEGREE IN BROADCASTING AND PRODUCTION TECHNOLOGY (AAS)

## Course and Hour Requirements

| Major Courses | | Credit Hours |
|---|---|---|
| BPT | 110 | 3 |
| BPT | 111 | 3 |
| BPT | 112 | 4 |
| BPT | 113 | 3 |
| BPT | 140 | 2 |
| BPT | 231 | 4 |
| BPT | 255 | 3 |
| BPT | 232 | 4 |
| BPT | 250 | 3 |
| BPT | 235 | 2 |
| BPT | 236 | 2 |
| BPT | 220 | 3 |
| BUS | 115 | 3 |
| CIS | 110 | 3 |
| CIS | 165 | 3 |
| BPT | 196 | 1 |
| SOC | 210 | 3 |

**Total Major Hours: 49**

| General Education Courses | | Credit Hours |
|---|---|---|
| **Communications:** | | |
| ENG | 111 | 3 |
| COM | 231 | 3 |
| ENG | 112 | 3 |
| or | | |
| ENG | 113 | 3 |

**Humanities/Fine Arts: Select one**

| | | |
|---|---|---|
| ART | 111 | 3 |
| ENG | 231 | 3 |
| ENG | 232 | 3 |
| ENG | 241 | 3 |
| ENG | 242 | 3 |
| HUM | 122 | 3 |
| HUM | 170 | 3 |
| HUM | 211 | 3 |
| MUS | 110 | 3 |
| PHI | 210 | 3 |
| PHI | 240 | 3 |
| REL | 211 | 3 |
| REL | 212 | 3 |
| REL | 221 | 3 |

**Social/Behavioral Science**

| | | |
|---|---|---|
| PSY | 150 | 3 |

**Natural Science/Mathematics**

| | | |
|---|---|---|
| MAT | 161 | 3 |

**Total General Education Hours: 18**

**Other Required Courses**

| | | |
|---|---|---|
| ACA | 115 | 1 |

**Total Other Required Hours: 1**

## TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 68

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN BROADCASTING AND PRODUCTION TECHNOLOGY (AAS)

### Suggested Sequence of Courses

**FIRST YEAR**

| FALL SEMESTER | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| BPT | 110 | Intro to Broadcasting | 3 | 0 | 3 |
| BPT | 111 | Broadcast Law & Ethics | 3 | 0 | 3 |
| BPT | 140 | Intro to TV Systems | 2 | 0 | 2 |
| BUS | 115 | Business Law I | 3 | 0 | 3 |
| ACA | 115 | Success and Study Skills | 0 | 2 | 1 |
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| CIS | 110 | Introduction to Computers | 2 | 2 | 3 |
| | | | 16 | 4 | 18 |

| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| BPT | 112 | Broadcasting Writing | 3 | 2 | 4 |
| BPT | 113 | Broadcast Sales | 3 | 0 | 3 |
| PSY | 150 | General Psychology | 3 | 0 | 3 |
| ENG | 112 | Argument-Based Research | 3 | 0 | 3 |
| or | | | | | |
| ENG | 113 | Literature-Based Research | 3 | 0 | 3 |
| | | | 12 | 2 | 13 |

| SUMMER TERM | | | | | |
|---|---|---|---|---|---|
| BPT | 235 | TV Performance I (8 wks) | 0 | 6 | 2 |
| BPT | 196 | Sem in Contemp Broadcasting & Issues | 1 | 0 | 1 |
| BPT | 255 | Computer-Based Production | 2 | 3 | 3 |
| BPT | 220 | Broadcast Marketing | 3 | 0 | 3 |
| | | Humanities/Fine Arts Elective | 3 | 0 | 3 |
| | | | 9 | 9 | 12 |

**SECOND YEAR**

| FALL SEMESTER | | | | | |
|---|---|---|---|---|---|
| BPT | 231 | Video/TV Production I | 2 | 6 | 4 |
| COM | 231 | Public Speaking | 3 | 0 | 3 |
| MAT | 161 | College Algebra | 3 | 0 | 3 |
| | | | 8 | 6 | 10 |

| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| BPT | 232 | Video/TV Production II | 2 | 6 | 4 |
| BPT | 250 | Institutional Video | 2 | 3 | 3 |
| CIS | 165 | Desktop Publishing | 2 | 2 | 3 |
| BPT | 236 | TV Performance II (8 wks) | 0 | 6 | 2 |
| SOC | 210 | Introduction to Sociology | 3 | 0 | 3 |
| | | | 9 | 17 | 15 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 68**

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN BUSINESS ADMINISTRATION (AAS)

The Business Administration curriculum is designed to introduce students to the various aspects of the free enterprise system. Students will be provided with a fundamental knowledge of business functions, processes, and an understanding of business organizations in today's global economy.

Course work includes business concepts such as accounting, business law, economics, management, and marketing. Skills related to the application of these concepts are developed through the study of computer applications, communication, team building, and decision making.

Through these skills, students will have a sound business education base for lifelong learning. Graduates are prepared for employment opportunities in government agencies, financial institutions, and large to small business or industry.

# ASSOCIATE IN APPLIED SCIENCE DEGREE IN BUSINESS ADMINISTRATION (AAS)

## Course and Hour Requirements

| Major Courses | | Credit Hours |
|---|---|---|
| ACC | 120 | 4 |
| BUS | 115 | 3 |
| BUS | 137 | 3 |
| MKT | 120 | 3 |
| ECO | 251 | 3 |
| BUS | 121 | 3 |
| BUS | 260 | 3 |
| ECO | 252 | 3 |
| BUS | 110 | 3 |
| ACC | 121 | 3 |
| BUS | 116 | 4 |
| BUS | 153 | 3 |
| BUS | 225 | 3 |
| BUS | 253 | 3 |
| CIS | 120 | 3 |
| CIS | 110 | 3 |
| or | | |
| OST | 137 | 2 |

**Total Major Hours: 49/50**

| General Education Courses | | Credit Hours |
|---|---|---|
| **Communications:** | | |
| ENG | 111 | 3 |
| COM | 231 | 3 |
| ENG | 112 | 3 |
| or | | |
| ENG | 113 | 3 |

**Humanities/Fine Arts: Select one**

| | | |
|---|---|---|
| ART | 111 | 3 |
| ENG | 231 | 3 |
| ENG | 232 | 3 |
| ENG | 233 | 3 |
| ENG | 241 | 3 |
| ENG | 242 | 3 |
| HUM | 122 | 3 |
| HUM | 170 | 3 |
| HUM | 211 | 3 |
| MUS | 110 | 3 |
| PHI | 210 | 3 |
| PHI | 240 | 3 |
| REL | 211 | 3 |
| REL | 212 | 3 |
| REL | 221 | 3 |

**Social/Behavioral Science: Select one**

| | | |
|---|---|---|
| PSY | 150 | 3 |
| SOC | 210 | 3 |

**Natural Science/Mathematics: Select one**

| | | |
|---|---|---|
| MAT | 161 | 3 |
| MAT | 140 | 3 |

**Total General Education Hours: 18**

**Other Required Courses**

| | | |
|---|---|---|
| ACA | 115 | 1 |

**Total Other Required Hours: 1**

## TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 68/69

# ASSOCIATE IN APPLIED SCIENCE DEGREE IN BUSINESS ADMINISTRATION (AAS)

## Suggested Sequence of Courses

| FIRST YEAR | | | | HOURS | |
|---|---|---|---|---|---|
| **FALL SEMESTER** | | | **CLASS** | **LAB** | **CREDIT** |
| BUS | 110 | Introduction to Business | 3 | 0 | 3 |
| BUS | 115 | Business Law I | 3 | 0 | 3 |
| COM | 231 | Public Speaking | 3 | 0 | 3 |
| BUS | 121 | Business Math | 2 | 2 | 3 |
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| ACA | 115 | Success and Study Skills | 0 | 2 | 1 |
| | | | 14 | 4 | 16 |
| **SPRING SEMESTER** | | | | | |
| ENG | 112 | Argument-Based Research | 3 | 0 | 3 |
| or | | | | | |
| ENG | 113 | Literature-Based Research | 3 | 0 | 3 |
| BUS | 116 | Business Law II | 3 | 0 | 3 |
| PSY | 150 | General Psychology | 3 | 0 | 3 |
| or | | | | | |
| SOC | 210 | Intro to Sociology | 3 | 0 | 3 |
| CIS | 110 | Introduction to Computers | 2 | 2 | 3 |
| or | | | | | |
| OST | 137 | Office Software App | 1 | 2 | 2 |
| MKT | 120 | Principles of Marketing | 3 | 0 | 3 |
| MAT | 140 | Survey of Mathematics | 3 | 0 | 3 |
| or | | | | | |
| MAT | 161 | College Algebra | 3 | 0 | 3 |
| | | | 16-17 | 2 | 17-18 |
| **SECOND YEAR** | | | | | |
| **FALL SEMESTER** | | | | | |
| ACC | 120 | Principles of Accounting I | 3 | 2 | 4 |
| BUS | 137 | Principles of Management | 3 | 0 | 3 |
| ECO | 251 | Principles of Microeconomics | 3 | 0 | 3 |
| CIS | 120 | Spreadsheet I | 2 | 2 | 3 |
| BUS | 260 | Business Communications | 3 | 0 | 3 |
| BUS | 253 | Leadership and Management Skills | 3 | 0 | 3 |
| | | | 17 | 4 | 19 |
| **SPRING SEMESTER** | | | | | |
| ACC | 121 | Principles of Accounting II | 3 | 2 | 4 |
| ECO | 252 | Principles of Macroeconomics | 3 | 0 | 3 |
| BUS | 225 | Business Finance | 3 | 0 | 3 |
| BUS | 153 | Human Resource Management | 2 | 2 | 3 |
| | | Humanities Elective | 3 | 0 | 3 |
| | | | 14 | 4 | 16 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 68-69**

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN BUSINESS ADMINISTRATION - MARKETING AND RETAILING (AAS)

Marketing and Retailing is a concentration under the curriculum title of Business Administration. This curriculum is designed to provide students with fundamental skills in marketing and retailing.

Course work includes: marketing, retailing, merchandising, selling, advertising, computer technology, and management.

Graduates should qualify for marketing positions within manufacturing, retailing, and service organizations.

# ASSOCIATE IN APPLIED SCIENCE DEGREE IN BUSINESS ADMINISTRATION - MARKETING AND RETAILING (AAS)

## Course and Hour Requirements

| Major Courses | | Credit Hours |
|---|---|---|
| ACC | 120 | 4 |
| BUS | 115 | 3 |
| BUS | 137 | 3 |
| MKT | 120 | 3 |
| ECO | 251 | 3 |
| MKT | 122 | 3 |
| MKT | 123 | 3 |
| MKT | 220 | 3 |
| MKT | 225 | 3 |
| CIS | 110 | 3 |
| or | | |
| OST | 137 | 2 |
| CIS | 120 | 3 |
| OST | 286 | 2 |
| MKT | 125 | 3 |
| BUS | 280 | 4 |

**Select one:**

| | | |
|---|---|---|
| MKT | 226 | 3 |
| MKT | 227 | 3 |

**Select one:**

| | | |
|---|---|---|
| BUS | 260 | 3 |
| BUS | 240 | 3 |

**Total Major Hours: 48/49**

### General Education Courses:

| Communications | | Credit Hours |
|---|---|---|
| ENG | 111 | 3 |
| COM | 231 | 3 |
| ENG | 112 | 3 |
| or | | |
| ENG | 113 | 3 |

**Humanities/Fine Arts: Select one**

| | | |
|---|---|---|
| ART | 111 | 3 |
| ENG | 231 | 3 |
| ENG | 232 | 3 |
| ENG | 233 | 3 |
| ENG | 241 | 3 |
| ENG | 242 | 3 |
| HUM | 122 | 3 |
| HUM | 170 | 3 |
| HUM | 211 | 3 |
| MUS | 110 | 3 |
| PHI | 210 | 3 |
| PHI | 240 | 3 |
| REL | 211 | 3 |
| REL | 212 | 3 |
| REL | 221 | 3 |

**Social/Behavioral Science: Select one**

| | | |
|---|---|---|
| PSY | 150 | 3 |
| SOC | 210 | 3 |

**Natural Science/Mathematics: Select one**

| | | |
|---|---|---|
| MAT | 161 | 3 |
| MAT | 140 | 3 |

**Total General Education Hours: 18**

**Other Required Courses**

| | | |
|---|---|---|
| ACA | 115 | 1 |

**Total Other Required Hours: 1**

## TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 67/68

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN BUSINESS ADMINISTRATION - MARKETING AND RETAILING (AAS)

### Suggested Sequence of Courses

**FIRST YEAR**

| FALL SEMESTER | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| MKT | 120 | Principles of Marketing | 3 | 0 | 3 |
| BUS | 115 | Business Law I | 3 | 0 | 3 |
| MKT | 123 | Fundamentals of Selling | 3 | 0 | 3 |
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| ACA | 115 | Success and Study Skills | 0 | 2 | 1 |
| | | Humanities/Fine Arts | 3 | 0 | 3 |
| | | | 15 | 2 | 16 |

**SPRING SEMESTER**

| | | | | | |
|---|---|---|---|---|---|
| BUS | 127 | Principles of Management | 3 | 0 | 3 |
| MKT | 122 | Visual Merchandising | 3 | 0 | 3 |
| MKT | 125 | Buying and Merchandising | 3 | 0 | 3 |
| ENG | 112 | Argument-Based Research | 3 | 0 | 3 |
| or | | | | | |
| ENG | 113 | Literature-Based Research | 3 | 0 | 3 |
| CIS | 110 | Introduction to Computers | 3 | 0 | 3 |
| or | | | | | |
| OST | 137 | Office Software App. | 1 | 2 | 2 |
| COM | 231 | Pulblic Speaking | 3 | 0 | 3 |
| | | | 16-18 | 0-2 | 17-18 |

**SECOND YEAR**

**FALL SEMESTER**

| | | | | | |
|---|---|---|---|---|---|
| MKT | 226 | Retail Applications | 3 | 0 | 3 |
| or | | | | | |
| MKT | 227 | MKT Applications | 3 | 0 | 3 |
| ACC | 120 | Principles of Accounting I | 3 | 2 | 4 |
| MKT | 220 | Advertising and Sales Promotion | 3 | 0 | 3 |
| ECO | 251 | Principles of Microeconomics | 3 | 0 | 3 |
| | | Natural Science/Mathematics | 3 | 0 | 3 |
| | | | 15 | 2 | 16 |

**SPRING SEMESTER**

| | | | | | |
|---|---|---|---|---|---|
| MKT | 225 | Marketing Research | 3 | 0 | 3 |
| OST | 286 | Professional Development | 2 | 0 | 2 |
| BUS | 280 | REAL Small Business | 4 | 0 | 4 |
| CIS | 120 | Spreadsheet I | 2 | 2 | 3 |
| | | Social Behavioral Science | 3 | 0 | 3 |
| BUS | 240 | Business Ethics | 3 | 0 | 3 |
| or | | | | | |
| BUS | 260 | Business Communications | 3 | 0 | 3 |
| | | | 17 | 2 | 18 |

### TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 67/68

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN COMPUTER PROGRAMMING (AAS)

The Computer Programming curriculum prepares individuals for employment as computer programmers and related positions through study and applications in computer concepts, logic, programming procedures, languages, generators, operating systems, networking, data management, and business operations.

Students will solve business computer problems through programming techniques and procedures, using appropriate languages and software. The primary emphasis of the curriculum is hands-on training in programming and related computer areas that provide the ability to adapt as systems evolve.

Graduates should qualify for employment in business, industry, and government organizations as programmers, programmer trainees, programmer/analysis, software developers, computer operators, systems technicians, database specialists, computer specialists, software specialists, or information systems managers.

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN COMPUTER PROGRAMMING (AAS)

### Course and Hour Requirements

| Major Courses | | Credit Hours |
|---|---|---|
| CIS | 110 | 3 |
| CIS | 115 | 3 |
| CIS | 152 | 3 |
| NET | 110 | 3 |
| CIS | 130 | 3 |
| CSC | 139 | 3 |
| CSC | 138* | 3 |
| CSC | 239 | 3 |
| CSC | 238* | 3 |
| CIS | 153 | 3 |
| CIS | 120 | 3 |
| CIS | 220 | 3 |
| CSC | 141 | 3 |
| CSC | 248 | 3 |

**Choose 10 hours of major electives:**

| | | |
|---|---|---|
| CIS | 172 | 3 |
| OST | 286 | 2 |
| CIS | 145 | 3 |
| CIS | 217 | 3 |
| CSC | 241 | 3 |

**Total Major Hours: 52**

| General Education Courses | | Credit Hours |
|---|---|---|
| **Communications:** | | |
| ENG | 111 | 3 |
| COM | 231 | 3 |
| ENG | 112 | 3 3 |

**Humanities/Fine Arts: Select one**

| | | |
|---|---|---|
| ART | 111 | 3 |
| ENG | 231 | 3 |
| ENG | 232 | 3 |
| ENG | 233 | 3 |
| ENG | 241 | 3 |
| ENG | 242 | 3 |
| HUM | 122 | 3 |
| HUM | 170 | 3 |
| MUS | 110 | 3 |
| HUM | 211 | 3 |
| PHI | 210 | 3 |
| PHI | 240 | 3 |
| REL | 211 | 3 |
| REL | 212 | 3 |
| REL | 221 | 3 |

**Social/Behavioral Science: Select one**

| | | |
|---|---|---|
| PSY | 150 | 3 |
| SOC | 210 | 3 |

**Natural Science/Mathematics**

| | | |
|---|---|---|
| MAT | 151 | 3 |

**Total General Education Hours: 18**

**Other Required Courses**

| | | |
|---|---|---|
| ACA | 115 | 1 |

**Total Other Required Hours: 1**

### TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 71

* These courses should be taken at Isothermal Community College (or equivalent institution).

# ASSOCIATE IN APPLIED SCIENCE DEGREE IN COMPUTER PROGRAMMING (AAS)

## Suggested Sequence of Courses

### FIRST YEAR
### FALL SEMESTER

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| CIS | 110 | Introduction to Computers | 2 | 2 | 3 |
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| ACA | 115 | Success and Study Skills | 0 | 2 | 1 |
| NET | 110 | Data Communications/ Networking | 2 | 2 | 3 |
| PSY | 150 | General Psychology | 3 | 0 | 3 |
| or | | | | | |
| SOC | 210 | Introduction to Sociology | 3 | 0 | 3 |
| | | | 10 | 6 | 13 |

### SPRING SEMESTER

| | | | | | |
|---|---|---|---|---|---|
| ENG | 112 | Argument-Based Research | 3 | 0 | 3 |
| CIS | 120 | Spreadsheet I | 2 | 2 | 3 |
| CIS | 152 | Database Concepts & Apps | 2 | 2 | 3 |
| CIS | 115 | Intro to Prog & Logic | 2 | 2 | 3 |
| CIS | 130 | Survey of Operating Systems | 2 | 3 | 3 |
| | | | 11 | 9 | 15 |

### SUMMER TERM

| | | | | | |
|---|---|---|---|---|---|
| CIS | 220 | Spreadsheets II | 1 | 2 | 2 |
| CIS | 153 | Database Applications | 2 | 2 | 3 |
| MAT | 151 | Statistics I | 3 | 0 | 3 |
| COM | 231 | Public Speaking | 3 | 0 | 3 |
| | | Humanities/Fine Arts Elective | 3 | 0 | 3 |
| | | | 12 | 4 | 14 |

### SECOND YEAR
### FALL SEMESTER

| | | | | | |
|---|---|---|---|---|---|
| CSC | 138 | RPG Programming | 2 | 3 | 3 |
| CSC | 139 | Visual BASIC Programming | 2 | 3 | 3 |
| CSC | 141 | Visual C++ Programming | 2 | 3 | 3 |
| | | Major Elective | | | |
| | | Major Elective | | | |

### SPRING SEMESTER

| | | | | | |
|---|---|---|---|---|---|
| CSC | 238 | Advanced RPG | 2 | 3 | 3 |
| CSC | 239 | Advanced Visual BASIC | 2 | 3 | 3 |
| CSC | 248 | Adv Internet Progr | 2 | 3 | 3 |
| | | Major Elective | | | |
| | | Major Elective | | | |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 71**

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN
## CRIMINAL JUSTICE TECHNOLOGY (AAS)

The Criminal Justice Technology curriculum is designed to provide knowledge of criminal justice systems and operations. Study will focus on local, state, and federal law enforcement, judicial processes, corrections, and security services. The criminal justice system's role within society will be explored.

Emphasis is on criminal justice systems, criminology, juvenile justice, criminal and constitutional law, investigative principles, ethics, and community relations. Additional study may include issues and concepts of government, counseling, communications, computers, and technology.

Employment opportunities exist in a variety of local, state, and federal law enforcement, corrections, and security fields. Examples include police officer, deputy sheriff, county detention officer, state trooper, intensive probation/parole surveillance officer, correctional officer, and loss prevention specialist.

# ASSOCIATE IN APPLIED SCIENCE DEGREE IN CRIMINAL JUSTICE TECHNOLOGY (AAS)

## Course and Hour Requirements

| Major Courses | | Credit Hours | Choose 3 hours from the following: | | Credit Hours |
|---|---|---|---|---|---|
| CJC | 111 | 3 | HIS | 111 | 3 |
| CJC | 112 | 3 | HIS | 112 | 3 |
| CJC | 113 | 3 | HIS | 131 | 3 |
| CJC | 131 | 3 | HIS | 132 | 3 |
| CJC | 212 | 3 | POL | 120 | 3 |
| CJC | 221 | 4 | POL | 220 | 3 |
| CJC | 231 | 3 | | | |

**Choose 15 hours from the following:**

**Total Major Hours: 49**

| CJC | 132 | 3 |
|---|---|---|
| CJC | 121 | 3 |
| CJC | 141 | 3 |
| CJC | 214 | 3 |
| CJC | 151 | 3 |
| CJC | 211 | 3 |
| CJC | 222 | 3 |
| CJC | 215 | 3 |
| CJC | 225 | 3 |
| CJC | 213 | 3 |
| CJC | 233 | 3 |
| CJC | 232 | 3 |
| CJC | 223 | 3 |
| CJC | 122 | 3 |
| CJC | 241 | 3 |
| CJC | 191 | 1 |
| CJC | 291 | 1 |
| CJC | 114 | 2 |
| CJC | 120 | 2 |
| COE | 111 | 1 |

**General Education Courses Communications:**

| ENG | 111 | 3 |
|---|---|---|
| ENG | 112 | 3 |
| or | | |
| ENG | 113 | 3 |

**Humanities/Fine Arts: Select one**

| ART | 111 | 3 |
|---|---|---|
| ENG | 231 | 3 |
| ENG | 232 | 3 |
| ENG | 233 | 3 |
| ENG | 241 | 3 |
| ENG | 242 | 3 |
| HUM | 122 | 3 |
| HUM | 170 | 3 |
| HUM | 211 | 3 |
| MUS | 110 | 3 |
| PHI | 210 | 3 |
| PHI | 240 | 3 |
| REL | 211 | 3 |
| REL | 212 | 3 |
| REL | 221 | 3 |

**Choose 3 hours
from the following:**

| PSY | 135 | 3 |
| PSY | 239 | 3 |
| PSY | 241 | 3 |
| PSY | 243 | 3 |
| PSY | 281 | 3 |
| SOC | 213 | 3 |
| SOC | 220 | 3 |

**Choose 6 hours
from the following:**

| CIS | 110 | 3 |
| CIS | 115 | 3 |
| CIS | 130 | 3 |
| CIS | 120 | 3 |
| CIS | 260 | 3 |
| CIS | 165 | 3 |
| CIS | 169 | 2 |
| CIS | 220 | 2 |

**Social/Behavioral Science**

| SOC | 210 | 3 |

**Natural Science/Mathematics**

| MAT | 161 | 3 |

**Total General Education Hours: 15**

**Other Required Courses**

| ACA | 115 | 1 |
| COM | 231 | 3 |
| PSY | 150 | 3 |

**Total Other Required Hours: 7**

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 71**

# ASSOCIATE IN APPLIED SCIENCE DEGREE IN CRIMINAL JUSTICE TECHNOLOGY (AAS)

## Suggested Sequence of Courses

### FIRST YEAR
**FALL SEMESTER**

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| CJC | 111 | Intro to Criminal Justice | 3 | 0 | 3 |
| CJC | 112 | Criminology | 3 | 0 | 3 |
| CJC | 121 | Law Enforcement Operations | 3 | 0 | 3 |
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| SOC | 210 | Intro to Sociology | 3 | 0 | 3 |
| ACA | 115 | Success and Study Skills | 0 | 2 | 1 |
| | | Choose 3 hours of POL or HIS | 3 | 0 | 3 |
| | | | 18 | 2 | 19 |

**SPRING SEMESTER**

| | | | | | |
|---|---|---|---|---|---|
| CJC | 113 | Juvenile Justice | 3 | 0 | 3 |
| CJC | 131 | Criminal Law | 3 | 0 | 3 |
| CJC | 132 | Court Procedure and Evidence | 3 | 0 | 3 |
| PSY | 150 | General Psychology | 3 | 0 | 3 |
| MAT | 161 | College Algebra | 3 | 0 | 3 |
| ENG | 112 | Argument-Based Research | 3 | 0 | 3 |
| or | | | | | |
| ENG | 113 | Literature-Based Research | 3 | 0 | 3 |
| | | | 18 | 0 | 18 |

### SECOND YEAR
**FALL SEMESTER**

| | | | | | |
|---|---|---|---|---|---|
| CJC | 212 | Ethics & Community Relations | 3 | 0 | 3 |
| CJC | 221 | Investigative Principles | 3 | 2 | 4 |
| CJC | 141 | Corrections | 3 | 0 | 3 |
| | | Humanities/Fine Arts | 3 | 0 | 3 |
| | | Choose 3 hours of PSY or SOC | 3 | 0 | 3 |
| | | Choose any CIS | 3 | 0 | 3 |
| | | | 18 | 2 | 19 |

**SPRING SEMESTER**

| | | | | | |
|---|---|---|---|---|---|
| CJC | 231 | Constitutional Law | 3 | 0 | 3 |
| CJC | 214 | Victimology | 3 | 0 | 3 |
| COM | 231 | Public Speaking | 3 | 0 | 3 |
| | | Choose any CIS | 3 | 0 | 3 |

**Choose 3 hours:**

| | | | | | |
|---|---|---|---|---|---|
| CJC | 191 | Selected Topics in Corrections | 0 | 3 | 1 |
| CJC | 291 | Selected Topics in Criminal Justice | 0 | 3 | 1 |
| COE | 111 | Co-op Work Experience | 0 | 10 | 1 |
| CJC | 211 | Counseling | 3 | 0 | 3 |
| | | | 15 | 16 | 15 |

## TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 71

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN
## EARLY CHILDHOOD ASSOCIATE (AAS)

The Early Childhood Associate curriculum prepares individuals to work with children from infancy through middle childhood in diverse learning environments. Students will combine learned theories with practice in actual settings with young children under the supervision of qualified teachers.

Course work includes child growth and development; physical/nutritional needs of children; care and guidance of children; and communication skills with parents and children. Students will foster the cognitive/language, physical/motor, social/emotional and creative development of young children.

Graduates are prepared to plan and implement developmentally appropriate programs in early childhood settings. Employment opportunities include child development and child care programs, preschools, public and private schools, recreational centers, Head Start Programs, and school age programs.

# ASSOCIATE IN APPLIED SCIENCE DEGREE IN
# EARLY CHILDHOOD ASSOCIATE
# PROFESSIONAL BUSINESS AND MANAGEMENT OPTION (AAS)

## Course and Hour Requirements

| Major Courses | | Credit Hours |
|---|---|---|
| COE | 111 | 1 |
| EDU | 131 | 3 |
| EDU | 146 | 3 |
| EDU | 221 | 3 |
| EDU | 111 | 2 |
| EDU | 144 | 3 |
| EDU | 145 | 3 |
| EDU | 151 | 3 |
| EDU | 153 | 3 |
| EDU | 251 | 3 |
| EDU | 259 | 3 |
| EDU | 261 | 2 |
| CIS | 110 | 3 |
| HEA | 110 | 2 |

**Choose One:**

| EDU | 112 | 2 |
|---|---|---|
| EDU | 113 | 2 |

**Choose 2-3 hours
of major electives:**

| EDU | 185 | 3 |
|---|---|---|
| EDU | 234 | 3 |
| EDU | 235 | 2 |
| EDU | 262 | 3 |
| EDU | 282 | 3 |

**Prof. Business and
Management Option**

| BUS | 137 | 3 |
|---|---|---|
| BUS | 110 | 3 |
| ACC | 120 | 4 |

**Total Major Hours: 51-52**

| General Education Courses | | Credit Hours |
|---|---|---|
| **Communications:** | | |
| ENG | 111 | 3 |
| ENG | 112 | 3 |
| or | | |
| ENG | 113 | 3 |

**Humanities/Fine Arts: Select one**

| ART | 111 | 3 |
|---|---|---|
| ENG | 231 | 3 |
| ENG | 232 | 3 |
| ENG | 233 | 3 |
| ENG | 241 | 3 |
| ENG | 242 | 3 |
| HUM | 122 | 3 |
| HUM | 170 | 3 |
| HUM | 211 | 3 |
| MUS | 110 | 3 |
| PHI | 210 | 3 |
| PHI | 240 | 3 |
| REL | 211 | 3 |
| REL | 212 | 3 |
| REL | 221 | 3 |

**Social/Behavioral Science**

| SOC | 210 | 3 |
|---|---|---|

**Natural Science/Mathematics:
Select one**

| MAT | 161 | 3 |
|---|---|---|
| MAT | 140 | 3 |

**Total General Education Hours: 15**

**Other Required Courses**

| ACA | 115 | 1 |
|---|---|---|
| COM | 231 | 3 |

**Total Other Required Hours: 4**

## TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 70-71

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN
## EARLY CHILDHOOD ASSOCIATE
## PROFESSIONAL BUSINESS AND MANAGEMENT OPTION (AAS)

### Suggested Sequence of Courses

**FIRST YEAR**

| FALL SEMESTER | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| ACA | 115 | Success and Study Skills | 0 | 2 | 1 |
| CIS | 110 | Introduction to Computers | 2 | 2 | 3 |
| EDU | 111 | Early Childhood Credential I | 2 | 0 | 2 |
| EDU | 144 | Child Development I | 3 | 0 | 3 |
| EDU | 153 | Health, Safety, & Nutrition | 3 | 0 | 3 |
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| EDU | 151 | Creative Activities | 3 | 0 | 3 |
| | | | 16 | 4 | 18 |

| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| BUS | 110 | Intro to Business | 3 | 0 | 3 |
| EDU | 112 | Early Childhood Credential II | 2 | 0 | 2 |
| or | | | | | |
| EDU | 113 | Family Childhood Credential | 2 | 0 | 2 |
| EDU | 145 | Child Development II | 3 | 0 | 3 |
| EDU | 146 | Child Guidance | 3 | 0 | 3 |
| COM | 231 | Public Speaking | 3 | 0 | 3 |
| ENG | 112 | Argument-Based Research | 3 | 0 | 3 |
| or | | | | | |
| ENG | 113 | Literature-Based Research | 3 | 0 | 3 |
| | | | 17 | 0 | 17 |

**SECOND YEAR**

| FALL SEMESTER | | | | | |
|---|---|---|---|---|---|
| ACC | 120 | Principles of Accounting | 3 | 2 | 4 |
| EDU | 131 | Children, Family, and Community | 3 | 0 | 3 |
| EDU | 221 | Children with Special Needs | 3 | 0 | 3 |
| EDU | 251 | Exploration Activities | 3 | 0 | 3 |
| EDU | 261 | Early Childhood Admin I | 2 | 0 | 2 |
| SOC | 210 | Introduction to Sociology | 3 | 0 | 3 |
| | | | 17 | 0 | 18 |

| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| BUS | 137 | Principles of Management | 3 | 0 | 3 |
| COE | 111 | Co-op Work Experience I | 0 | 10 | 1 |
| EDU | 259 | Curriculum Planning | 3 | 0 | 3 |
| HEA | 111 | First Aid and Safety | 1 | 2 | 2 |
| MAT | 140 | Survey of Math | 3 | 0 | 3 |
| or | | | | | |
| MAT | 161 | College Algebra | 3 | 0 | 3 |
| | | Humanities/Fine Arts Elective | 3 | 0 | 3 |
| | | Major Elective | | | 2-3 |
| | | | | | 17-18 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 70-71**

# ASSOCIATE IN APPLIED SCIENCE DEGREE IN EARLY CHILDHOOD ASSOCIATE PROFESSIONAL FUNDAMENTALS OPTION (AAS)

## Course and Hour Requirements

| Major Courses | | Credit Hours |
|---|---|---|
| COE | 111 | 1 |
| EDU | 131 | 3 |
| EDU | 146 | 3 |
| EDU | 221 | 3 |
| EDU | 111 | 2 |
| EDU | 144 | 3 |
| EDU | 145 | 3 |
| EDU | 151 | 3 |
| EDU | 153 | 3 |
| EDU | 251 | 3 |
| EDU | 259 | 3 |
| EDU | 261 | 2 |
| CIS | 110 | 3 |
| HEA | 110 | 2 |

**Choose One:**

| | | |
|---|---|---|
| EDU | 112 | 2 |
| EDU | 113 | 2 |

**Choose 2-3 hours of major electives:**

| | | |
|---|---|---|
| EDU | 185 | 3 |
| EDU | 234 | 3 |
| EDU | 235 | 2 |
| EDU | 262 | 3 |
| EDU | 282 | 3 |

**Prof. Fundamentals Option**

| | | |
|---|---|---|
| PSY | 243 | 3 |
| PSY | 150 | 3 |
| SOC | 213 | 3 |

**Total Major Hours: 50-51**

| General Education Courses | | Credit Hours |
|---|---|---|
| **Communications:** | | |
| ENG | 111 | 3 |
| ENG | 112 | 3 |
| or | | |
| ENG | 113 | 3 |

**Humanities/Fine Arts: Select one**

| | | |
|---|---|---|
| ART | 111 | 3 |
| ENG | 231 | 3 |
| ENG | 232 | 3 |
| ENG | 233 | 3 |
| ENG | 241 | 3 |
| ENG | 242 | 3 |
| HUM | 122 | 3 |
| HUM | 170 | 3 |
| HUM | 211 | 3 |
| MUS | 110 | 3 |
| PHI | 210 | 3 |
| PHI | 240 | 3 |
| REL | 211 | 3 |
| REL | 212 | 3 |
| REL | 221 | 3 |

**Social/Behavioral Science**

| | | |
|---|---|---|
| SOC | 210 | 3 |

**Natural Science/Mathematics: Select One**

| | | |
|---|---|---|
| MAT | 161 | 3 |
| MAT | 140 | 3 |

**Total General Education Hours: 15**

**Other Required Courses**

| | | |
|---|---|---|
| ACA | 115 | 1 |
| COM | 231 | 3 |

**Total Other Required Hours: 4**

## TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 69-70

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN EARLY CHILDHOOD ASSOCIATE PROFESSIONAL FUNDAMENTALS OPTION (AAS)

### Suggested Sequence of Courses

**FIRST YEAR**

| FALL SEMESTER | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| EDU | 111 | Early Childhood Credentials I | 2 | 0 | 2 |
| EDU | 144 | Child Development I | 3 | 0 | 3 |
| ACA | 115 | Success and Study Skills | 0 | 2 | 1 |
| PSY | 150 | General Psychology | 3 | 0 | 3 |
| EDU | 153 | Health, Safety, Nutrition | 3 | 0 | 3 |
| EDU | 151 | Creative Activities | 3 | 0 | 3 |
| | | | 17 | 2 | 18 |

| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| EDU | 112 | Early Childhood Credentials II | 2 | 0 | 2 |
| or | | | | | |
| EDU | 113 | Family Childhood Credential | 2 | 0 | 2 |
| EDU | 145 | Child Development II | 3 | 0 | 3 |
| EDU | 146 | Child Guidance | 3 | 0 | 3 |
| PSY | 243 | Child Psychology | 3 | 0 | 3 |
| ENG | 112 | Argument-Based Research | 3 | 0 | 3 |
| or | | | | | |
| ENG | 113 | Literature-Based Research | 3 | 0 | 3 |
| MAT | 140 | Survey of Math | 3 | 0 | 3 |
| or | | | | | |
| MAT | 161 | College Algebra | 3 | 0 | 3 |
| | | | 17 | 0 | 17 |

**SECOND YEAR**

| FALL SEMESTER | | | | | |
|---|---|---|---|---|---|
| EDU | 131 | Child, Family, Community | 3 | 0 | 3 |
| EDU | 221 | Children with Special Needs | 3 | 0 | 3 |
| EDU | 251 | Exploration Activities | 3 | 0 | 3 |
| CIS | 110 | Intro to Computers | 2 | 2 | 3 |
| EDU | 261 | Early Childhood Admin I | 2 | 0 | 2 |
| SOC | 210 | Intro to Sociology | 3 | 0 | 3 |
| | | | 16 | 2 | 17 |

| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| EDU | 259 | Curriculum Planning | 3 | 0 | 3 |
| COE | 111 | Co-op Work Experience I | 0 | 10 | 1 |
| COM | 231 | Public Speaking | 3 | 0 | 3 |
| HEA | 111 | First Aid and Safety | 1 | 2 | 2 |
| SOC | 213 | Sociology of the Family | 3 | 0 | 3 |
| | | Humanities/Fine Arts Elective | 3 | 0 | 3 |
| | | Major Elective | | | 2-3 |
| | | | | | 17-18 |

## TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 69-70

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN ELECTRONICS ENGINEERING TECHNOLOGY (AAS)

The Electronic Engineering Technology curriculum prepares individuals to become technicians who design, build, install, test, troubleshoot, repair, and modify developmental and production electronic components, equipment, and systems such as industrial/computer controls, manufacturing systems, communication systems, and power electronic systems.

A broad-based core of courses, including basic electricity, solid-state fundamentals, digital concepts, and microprocessors, ensures the student will develop the skills necessary to perform entry-level tasks. Emphasis is placed on developing the student's ability to analyze and troubleshoot electronic systems.

Graduates should qualify for employment as engineering assistants or electronic technicians with job titles such as electronics engineering technician, field service technician, maintenance technician, electronic tester, electronic systems integrator, bench technician, and production control technician.

# ASSOCIATE IN APPLIED SCIENCE DEGREE IN ELECTRONICS ENGINEERING TECHNOLOGY (AAS)

## Course and Hour Requirements

| Major Courses | | Credit Hours |
|---|---|---|
| ELC | 131 | 5 |
| ELN | 131 | 4 |
| ELN | 132 | 4 |
| ELN | 133 | 4 |
| ELN | 232 | 4 |
| MAT | 162 | 3 |
| PHY | 131 | 4 |
| ELN | 150 | 2 |
| ELN | 231 | 3 |
| ELN | 233 | 4 |
| ELC | 128 | 3 |
| ELN | 135 | 3 |
| EGR | 285 | 2 |
| ELN | 229 | 4 |
| CIS | 110 | 3 |
| CIS | 215 | 3 |

**Total Major Hours: 55**

### General Education Courses

| Communications: | | Credit Hours |
|---|---|---|
| ENG | 111 | 3 |
| ENG | 112 | 3 |
| or | | |
| ENG | 113 | 3 |

**Humanities/Fine Arts: Select one**

| | | |
|---|---|---|
| ART | 111 | 3 |
| ENG | 231 | 3 |
| ENG | 232 | 3 |
| ENG | 233 | 3 |
| ENG | 241 | 3 |
| ENG | 242 | 3 |
| HUM | 122 | 3 |
| HUM | 170 | 3 |
| HUM | 211 | 3 |
| MUS | 110 | 3 |
| PHI | 210 | 3 |
| PHI | 240 | 3 |
| REL | 211 | 3 |
| REL | 212 | 3 |
| REL | 221 | 3 |

**Social/Behavioral Science**

| | | |
|---|---|---|
| PSY | 150 | 3 |

**Natural Science/Mathematics**

| | | |
|---|---|---|
| MAT | 161 | 3 |

**Total General Education Hours: 15**

**Other Required Courses**

| | | |
|---|---|---|
| ACA | 115 | 1 |
| COM | 231 | 3 |

**Total Other Required Hours: 4**

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 74**

# ASSOCIATE IN APPLIED SCIENCE DEGREE IN ELECTRONICS ENGINEERING TECHNOLOGY (AAS)

## Suggested Sequence of Courses

### FIRST YEAR

| FALL SEMESTER | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| ELC | 131 | DC/AC Circuit Analysis | 4 | 3 | 5 |
| ELN | 133 | Digital Electronics | 3 | 3 | 4 |
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| MAT | 161 | College Algebra | 3 | 0 | 3 |
| CIS | 110 | Introduction to Computers | 2 | 2 | 3 |
| ACA | 115 | Success and Study Skills | 0 | 2 | 1 |
| | | | 15 | 10 | 19 |

| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| ELN | 131 | Electronic Devices | 3 | 3 | 4 |
| ELN | 232 | Intro to Microprocessors | 3 | 3 | 4 |
| ENG | 112 | Argument-Based Research | 3 | 0 | 3 |
| or | | | | | |
| ENG | 113 | Literature-Based Research | 3 | 0 | 3 |
| MAT | 162 | College Trigonometry | 3 | 0 | 3 |
| | | | 12 | 6 | 14 |

| SUMMER TERM | | | | | |
|---|---|---|---|---|---|
| ELN | 150 | CAD for Electronics | 1 | 3 | 2 |
| PSY | 150 | General Psychology | 3 | 0 | 3 |
| | | | 4 | 3 | 5 |

### SECOND YEAR

| FALL SEMESTER | | | | | |
|---|---|---|---|---|---|
| ELN | 132 | Linear IC Applications | 3 | 3 | 4 |
| ELN | 233 | Microprocessor Systems | 3 | 3 | 4 |
| ELN | 135 | Electronic Circuits | 2 | 3 | 3 |
| PHY | 131 | Physics-Mechanics | 3 | 2 | 4 |
| CIS | 215 | Hardware installation | 2 | 3 | 3 |
| | | | 13 | 14 | 18 |

| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| COM | 231 | Public Speaking | 3 | 0 | 3 |
| ELN | 231 | Industrial Controls | 2 | 3 | 3 |
| ELN | 229 | Industrial Electronics | 2 | 4 | 4 |
| ELC | 128 | Intro to PLC | 2 | 3 | 3 |
| | | | 9 | 10 | 13 |

| SUMMER TERM | | | | | |
|---|---|---|---|---|---|
| EGR | 285 | Design Project | 0 | 4 | 2 |
| | | Humanities/Fine Arts | 3 | 0 | 3 |
| | | | 3 | 4 | 5 |

## TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 74

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN
## FIRE PROTECTION TECHNOLOGY (AAS)

The Fire Protection Technology curriculum is designed to provide individuals with technical and professional knowledge to make decisions regarding fire protection for both public and private sectors. It also provides a sound foundation for continuous higher learning in fire protection, administration, and management.

Course work includes classroom and laboratory exercises to introduce the student to various aspects of fire protection. Students will learn technical and administrative skills such as hydraulics, hazardous materials, arson investigation, fire protection safety, fire suppression management, law, and codes.

Graduates should qualify for employment or advancement in governmental agencies, industrial firms, insurance rating organizations, educational organizations, and municipal fire departments. Employed persons should have opportunities for skilled and supervisory level positions within their current organizations.

# ASSOCIATE IN APPLIED SCIENCE DEGREE IN FIRE PROTECTION TECHNOLOGY (AAS)

## Course and Hour Requirements

| Major Courses | | Credit Hours |
|---|---|---|
| FIP | 120 | 2 |
| FIP | 124 | 3 |
| FIP | 128 | 3 |
| FIP | 230 | 5 |
| FIP | 220 | 3 |
| FIP | 256 | 2 |
| FIP | 132 | 3 |
| FIP | 140 | 2 |
| FIP | 152 | 2 |
| FIP | 136 | 3 |
| FIP | 276 | 3 |
| FIP | 236 | 2 |
| FIP | 144 | 3 |
| FIP | 260 | 3 |
| FIP | 156 | 2 |

**Select 8 hours:**

| | | |
|---|---|---|
| FIP | 164 | 2 |
| CHM | 151 | 4 |
| CHM | 121 | 3 |
| COE | 111 | 1 |
| ECO | 251 | 3 |
| ECO | 252 | 3 |
| POL | 120 | 3 |
| PHY | 101 | 4 |

**Total Major Hours: 49**

| General Education Courses | | Credit Hours |
|---|---|---|
| **Communications:** | | |
| ENG | 111 | 3 |
| ENG | 112 | 3 |
| or | | |
| ENG | 113 | 3 |

**Humanities/Fine Arts: Select one**

| | | |
|---|---|---|
| ART | 111 | 3 |
| ENG | 231 | 3 |
| ENG | 232 | 3 |
| ENG | 233 | 3 |
| ENG | 241 | 3 |
| ENG | 242 | 3 |
| HUM | 122 | 3 |
| HUM | 170 | 3 |
| HUM | 211 | 3 |
| MUS | 110 | 3 |
| PHI | 210 | 3 |
| PHI | 240 | 3 |
| REL | 211 | 3 |
| REL | 212 | 3 |
| REL | 221 | 3 |

**Social/Behavioral Science**

| | | |
|---|---|---|
| PSY | 150 | 3 |

**Natural Science/Mathematics**

| | | |
|---|---|---|
| MAT | 161 | 3 |

**Total General Education Hours: 15**

**Other Required Courses**

| | | |
|---|---|---|
| ACA | 115 | 1 |
| COM | 231 | 3 |

**Total Other Required Hours: 4**

## TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 68

# ASSOCIATE IN APPLIED SCIENCE DEGREE IN FIRE PROTECTION TECHNOLOGY (AAS)

## Suggested Sequence of Courses

**FIRST YEAR**

| FALL SEMESTER | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| FIP | 120 | Introduction to Fire Protection | 2 | 0 | 2 |
| FIP | 124 | Fire Prevention and Public Education | 3 | 0 | 3 |
| FIP | 140 | Industrial Fire Protection | 2 | 0 | 2 |
| FIP | 144 | Sprinklers and Auto Alarms | 2 | 2 | 3 |
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| ACA | 115 | Success and Study Skills | 0 | 2 | 1 |
| MAT | 161 | College Algebra | 3 | 0 | 3 |
| | | | 15 | 4 | 17 |

**SPRING SEMESTER**

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| FIP | 128 | Fire Detection and Investigation | 3 | 0 | 3 |
| FIP | 132 | Building Construction | 3 | 0 | 3 |
| FIP | 230 | Chemistry of Hazardous Materials I | 5 | 0 | 5 |
| ENG | 112 | Argument-Based Research | 3 | 0 | 3 |
| or | | | | | |
| ENG | 113 | Literature-Based Research | 3 | 0 | 3 |
| PSY | 150 | General Psychology | 3 | 0 | 3 |
| | | | 17 | 0 | 17 |

**SECOND YEAR**

| FALL SEMESTER | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| FIP | 136 | Inspection and Codes | 3 | 0 | 3 |
| FIP | 152 | Fire Protection Law | 2 | 0 | 2 |
| FIP | 156 | Computers in Fire Service | 1 | 2 | 2 |
| FIP | 236 | Emergency Management | 2 | 0 | 2 |

**Select 8 hours:**

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| CHM | 151 | General Chemistry I | 3 | 3 | 4 |
| COE | 111 | Co-op Work Experience | 0 | 10 | 1 |
| ECO | 251 | Prin of Microeconomics | 3 | 0 | 3 |
| ECO | 252 | Prin of Macroeconomics | 3 | 0 | 3 |
| POL | 120 | American Government | 3 | 0 | 3 |
| PHY | 101 | Fundamentals of Physics | 3 | 2 | 4 |
| | | | | | 17 |

**SPRING SEMESTER**

| | | | | | |
|---|---|---|---|---|---|
| FIP | 220 | Firefighting Strategies | 3 | 0 | 3 |
| FIP | 256 | Municipal Public Relations | 2 | 0 | 2 |
| FIP | 260 | Fire Protection Planning | 3 | 0 | 3 |
| FIP | 276 | Managing Fire Services | 3 | 0 | 3 |
| COM | 231 | Public Speaking | 3 | 0 | 3 |
| | | Humanities/Fine Arts Elective | 3 | 0 | 3 |
| | | | 17 | 0 | 17 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 68**

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN GENERAL OCCUPATIONAL TECHNOLOGY (AAS)

The General Occupational Technology Associate degree is designed to allow students or Business and Industry to prescribe a course of study to meet specific needs not addressed in other curriculum offerings. Due to the flexibility of this program offering, students pursuing this degree should do so under the guidance of a curriculum Dean working with their assigned advisor.

The following restrictions apply to the student pursuing the General Occupational Technology Associate degree:

1. Each student pursuing this degree must earn a minimum of 21 semester hours credit (shc) within this degree. (These hours cannot be transferred from other earned degrees or other colleges.)
2. Students pursuing this degree should delcare their intentions by designing a cause of study along with their advisor that would meet their specific goals.
3. The students declaration of intentions should demonstrate how course content will meet their specific goals.

**Major Hours:**
Prefixes for major courses for curriculums approved to be offered by the college.

46 hours minimum

**Other Required Courses:**
18 SHC from a combination of core courses for curriculums approved to be offered by the college.

18 SHC

### TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 64-76

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN INDUSTRIAL MANAGEMENT TECHNOLOGY (AAS)

The Industrial Management Technology curriculum is designed to equip students with the knowledge, skills, and abilities to function effectively in staff, front-line leadership, and midlevel management positions in organizations. The program emphasizes team building, TQM, SPC, motivation, continuous improvement, systems, and leadership.

Course work includes the integrated study of quality and productivity improvement, production operations, management, financial analysis, problem solving, and management of resources—human, physical, and information. Course work incorporates a broad understanding of computer applications to analyze and solve problems.

Graduates should qualify for entry level positions such as front-line supervisor, engineering assistant, production planner, inventory supervisor, or as a quality control technician. With additional training and experience, graduates could become plant management or production managers.

# ASSOCIATE IN APPLIED SCIENCE DEGREE IN INDUSTRIAL MANAGEMENT TECHNOLOGY (AAS)

## Course and Hour Requirements

| Major Courses | | Credit Hours |
|---|---|---|
| ISC | 112 | 2 |
| ISC | 132 | 3 |
| ISC | 133 | 2 |
| ISC | 135 | 3 |
| ISC | 136 | 3 |
| ISC | 233 | 3 |
| ISC | 128 | 2 |
| MEC | 111 | 3 |
| ISC | 110 | 1 |
| OMT | 150 | 3 |
| OMT | 155 | 3 |
| ISC | 221 | 3 |
| ISC | 170 | 3 |
| CIS | 110 | 3 |
| CIS | 120 | 3 |
| CIS | 152 | 3 |
| ISC | 235 | 3 |
| BUS | 115 | 3 |

**Total Major Hours: 49**

| General Education Courses | | Credit Hours |
|---|---|---|
| **Communications:** | | |
| ENG | 111 | 3 |
| ENG | 112 | 3 |
| COM | 231 | 3 |
| **Humanities/Fine Arts: Select one** | | |
| ART | 111 | 3 |
| ENG | 231 | 3 |
| ENG | 232 | 3 |
| ENG | 233 | 3 |
| ENG | 241 | 3 |
| ENG | 242 | 3 |
| HUM | 122 | 3 |
| HUM | 170 | 3 |
| MUS | 110 | 3 |
| HUM | 211 | 3 |
| PHI | 210 | 3 |
| PHI | 240 | 3 |
| REL | 211 | 3 |
| REL | 212 | 3 |
| REL | 221 | 3 |
| **Social/Behavioral Science: Select one** | | |
| PSY | 150 | 3 |
| SOC | 210 | 3 |
| **Natural Science/Mathematics: Select one** | | |
| MAT | 140 | 3 |
| MAT | 161 | 3 |

**Total General Education Hours: 18**

**Other Required Courses**

| ACA | 115 | 1 |
|---|---|---|

**Total Other Required Hours: 1**

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 68**

# ASSOCIATE IN APPLIED SCIENCE DEGREE IN INDUSTRIAL MANAGEMENT TECHNOLOGY (AAS)

## Suggested Sequence of Courses

### FIRST YEAR

| FALL SEMESTER | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| ISC | 110 | Workplace Safety | 1 | 0 | 1 |
| ISC | 112 | Industrial Safety | 2 | 0 | 2 |
| ISC | 135 | Principles of Industrial Management | 3 | 0 | 3 |
| OMT | 150 | Operation Mgmt Behavioral Sciences | 3 | 0 | 3 |
| CIS | 110 | Introduction to Computers | 2 | 2 | 3 |
| ACA | 115 | Success & Study Skills | 0 | 2 | 1 |
| MEC | 111 | Machine Processes I | 2 | 3 | 3 |
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| | | | 16 | 7 | 19 |

### SPRING SEMESTER

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| ISC | 132 | Manufacturing Quality Control | 2 | 3 | 3 |
| ISC | 133 | Manufacturing Management Practices | 2 | 0 | 2 |
| CIS | 120 | Spreadsheet I | 2 | 2 | 3 |
| ISC | 128 | Industrial Leadership | 2 | 0 | 2 |
| ENG | 112 | Argument-Based Research | 3 | 0 | 3 |
| MAT | 140 | Survey of Mathematics | 3 | 0 | 3 |
| or | | | | | |
| MAT | 161 | College Algebra | 3 | 0 | 3 |
| | | | 14 | 5 | 16 |

### SECOND YEAR
### FALL SEMESTER

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| ISC | 170 | Problem Solving Skills | 3 | 0 | 3 |
| COM | 231 | Public Speaking | 3 | 0 | 3 |
| ISC | 221 | Statistical Quality Control | 3 | 0 | 3 |
| ISC | 136 | Productivity Analysis I | 2 | 3 | 3 |
| CIS | 152 | Database Concepts & Applications | 2 | 2 | 3 |
| | | | 13 | 5 | 15 |

## SPRING SEMESTER

| | | | | | |
|---|---|---|---|---|---|
| ISC | 233 | Industrial Organization & Mgmt | 3 | 0 | 3 |
| ISC | 235 | Management Problems | 3 | 0 | 3 |
| OMT | 155 | Meeting and Presentation Skills | 3 | 0 | 3 |
| BUS | 115 | Business Law I | 3 | 0 | 3 |
| PSY | 150 | General Psychology | 3 | 0 | 3 |
| or | | | | | |
| SOC | 210 | Intro to Sociology | 3 | 0 | 3 |
| | | Humanities/Fine Arts Selection | 3 | 0 | 3 |
| | | | 18 | 0 | 18 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 68**

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN INFORMATION SYSTEMS (AAS)

The Information Systems curriculum is designed to prepare graduates for employment with organizations that use computers to process, manage, and communicate information. This is a flexible program, designed to meet community information systems needs.

Course work includes computer systems terminology and operations, logic, operating systems, database, data communications/networking, and related business topics. Studies will provide experience for students to implement, support, and customize industry-standard information systems.

Graduates should qualify for a wide variety of computer-related, entry-level positions that provide opportunities for advancement with increasing experience and ongoing training. Duties may include systems maintenance and troubleshooting, support and training, and business applications design and implementation.

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN INFORMATION SYSTEMS (AAS)

### Course and Hour Requirements

| Major Courses | | Credit Hours |
|---|---|---|
| CIS | 115 | 3 |
| CIS | 130 | 3 |
| CIS | 152 | 3 |
| CIS | 110 | 3 |
| NET | 110 | 3 |
| ACC | 120 | 4 |
| CIS | 215 | 3 |
| CIS | 216 | 2 |
| CIS | 225 | 2 |
| OST | 286 | 2 |
| CIS | 217 | 3 |
| CIS | 120 | 3 |
| CIS | 164 | 3 |

**Select 13 hours from the following:**

| | | |
|---|---|---|
| BUS | 280 | 4 |
| CIS | 169 | 2 |
| CIS | 220 | 2 |
| CIS | 153 | 3 |
| CIS | 172 | 3 |
| CSC | 139 | 3 |
| COE | 111 | 1 |
| COE | 122 | 2 |
| CSC | 141 | 3 |
| CIS | 245 | 3 |
| CIS | 145 | 3 |

**Total Major Hours: 50**

**General Education Courses**

**Communications:**

| | | Credit Hours |
|---|---|---|
| ENG | 111 | 3 |
| ENG | 112 | 3 |
| COM | 231 | 3 |

**Humanities/Fine Arts: Select one**

| | | |
|---|---|---|
| ART | 111 | 3 |
| ENG | 231 | 3 |
| ENG | 232 | 3 |
| ENG | 233 | 3 |
| ENG | 241 | 3 |
| ENG | 242 | 3 |
| HUM | 122 | 3 |
| HUM | 170 | 3 |
| MUS | 110 | 3 |
| HUM | 211 | 3 |
| PHI | 210 | 3 |
| PHI | 240 | 3 |
| REL | 211 | 3 |
| REL | 212 | 3 |
| REL | 221 | 3 |

**Social/Behavioral Science: Select one**

| | | |
|---|---|---|
| PSY | 150 | 3 |
| SOC | 210 | 3 |

**Natural Science/Mathematics**

| | | |
|---|---|---|
| MAT | 151 | 3 |

**Total General Education Hours: 18**

**Other Required Courses**

| | | |
|---|---|---|
| ACA | 115 | 1 |

**Total Other Required Hours: 1**

## TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 69

# ASSOCIATE IN APPLIED SCIENCE DEGREE IN INFORMATION SYSTEMS (AAS)

## Suggested Sequence of Courses

### FIRST YEAR

| FALL SEMESTER | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| ACA | 115 | Success and Study Skills | 0 | 2 | 1 |
| CIS | 110 | Introduction to Computers | 2 | 2 | 3 |
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| NET | 110 | Data Communications/ Networking | 2 | 2 | 3 |
| ACC | 120 | Principles of Accounting I | 3 | 2 | 4 |
| | | | 10 | 8 | 14 |

### SPRING SEMESTER

| | | | | | |
|---|---|---|---|---|---|
| CIS | 130 | Survey of Operating Systems | 2 | 3 | 3 |
| CIS | 120 | Spreadsheet I | 2 | 2 | 3 |
| CIS | 152 | Database Concepts and Applications | 2 | 2 | 3 |
| CIS | 164 | DTP Layout and Design | 2 | 2 | 3 |
| ENG | 112 | Argument-Based Research | 3 | 0 | 3 |
| | | | 11 | 9 | 15 |

### SUMMER TERM

| | | | | | |
|---|---|---|---|---|---|
| PSY | 150 | General Psychology | 3 | 0 | 3 |
| or | | | | | |
| SOC | 210 | Introduction to Sociology | 3 | 0 | 3 |
| | | Major Elective Choice | | | |
| | | Humanities/Fine Arts Elective | 3 | 0 | 3 |
| | | Major Elective Choice | | | |

### SECOND YEAR

### FALL SEMESTER

| | | | | | |
|---|---|---|---|---|---|
| CIS | 115 | Introduction to Logic | 2 | 2 | 3 |
| CIS | 215 | Hardware Installation/ Maintenance | 2 | 3 | 3 |
| COM | 231 | Public Speaking | 3 | 0 | 3 |
| CIS | 225 | Integrated Software | 1 | 2 | 2 |
| | | Major Elective Choice | | | |

### SPRING SEMESTER

| | | | | | |
|---|---|---|---|---|---|
| OST | 286 | Professional Development | 2 | 0 | 2 |
| CIS | 217 | Computer Training and Support | 2 | 2 | 3 |
| MAT | 151 | Statistics I | 3 | 0 | 3 |
| CIS | 216 | Software Installation/Maintenance | 1 | 2 | 2 |
| | | Major Elective Choice | | | |
| | | Major Elective Choice | | | |

## TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 71

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN MECHANICAL DRAFTING TECHNOLOGY (AAS) (Proposed For Fall 1999)

The Mechanical Drafting Technology curriculum prepares technicians to produce drawings of mechanical parts, components of mechanical systems, and mechanisms. CAD and the importance of technically correct drawings and designs based on current standards are emphasized.

Course work includes mechanical drafting, CAD, and proper drawing documentation. Concepts such as machine shop processes, basic materials, and physical sciences as they relate to the design process are also included. The use of proper dimensioning and tolerance techniques is stressed.

Graduates should qualify for employment in mechanical areas such as manufacturing, fabrication, research and development, and service industries.

# ASSOCIATE IN APPLIED SCIENCE DEGREE IN MECHANICAL DRAFTING TECHNOLOGY (AAS)
## ( Proposed For Fall 1999)

## Course and Hour Requirements

| Major Courses | | Credit Hours |
|---|---|---|
| DFT | 111 | 4 |
| DFT | 112 | 4 |
| DFT | 151 | 4 |
| DFT | 152 | 3 |
| MEC | 110 | 2 |
| CIS | 110 | 2 |
| CIS | 115 | 3 |
| or | | |
| CIS | 120 | 3 |
| DDF | 221 | 2 |
| DFT | 121 | 2 |
| DFT | 153 | 3 |
| DFT | 231 | 2 |
| HYD | 110 | 3 |
| ISC | 112 | 2 |
| ISC | 221 | 3 |
| ISC | 255 | 3 |
| MEC | 111 | 3 |
| MEC | 161 | 3 |
| MEC | 210 | 2 |

**Total Major Hours: 50**

| General Education Courses | | Credit Hours |
|---|---|---|
| **Communications:** | | |
| COM | 231 | 3 |
| ENG | 111 | 3 |
| ENG | 112 | 3 |
| or | | |
| ENG | 113 | 3 |

| Humanities/Fine Arts: Select one | | |
|---|---|---|
| ART | 111 | 3 |
| ENG | 231 | 3 |
| ENG | 232 | 3 |
| ENG | 233 | 3 |
| ENG | 241 | 3 |
| ENG | 242 | 3 |
| HUM | 122 | 3 |
| HUM | 170 | 3 |
| MUS | 110 | 3 |
| HUM | 211 | 3 |
| PHI | 210 | 3 |
| PHI | 240 | 3 |
| REL | 211 | 3 |
| REL | 212 | 3 |
| REL | 221 | 3 |

| Social/Behavioral Science: Select one | | |
|---|---|---|
| PSY | 150 | 3 |
| SOC | 210 | 3 |

| Natural Science/Mathematics | | |
|---|---|---|
| MAT | 161 | 3 |
| MAT | 162 | 3 |

**Total General Education Hours: 21**

| Other Required Courses | | |
|---|---|---|
| ACA | 115 | 1 |

**Total Other Required Hours: 1**

## TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 72

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN
## MECHANICAL DRAFTING TECHNOLOGY (AAS)
## (Proposed For Fall 1999)

### Suggested Sequence of Courses

**FIRST YEAR**

| FALL SEMESTER | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| ACA | 115 | Success and Study Skills | 0 | 2 | 1 |
| CIS | 110 | Introduction to Computers | 2 | 2 | 3 |
| DFT | 111 | Technical Drafting I | 2 | 6 | 4 |
| DFT | 151 | CAD I | 2 | 3 | 3 |
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| MAT | 161 | College Algebra | 3 | 0 | 3 |
| | | | 12 | 13 | 17 |

| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| DFT | 152 | CAD II | 2 | 3 | 3 |
| DFT | 121 | Introduction to GD & T | 1 | 2 | 2 |
| ENG | 112 | Argument-Based Research | 3 | 0 | 3 |
| or | | | | | |
| ENG | 113 | Literature-Based Research | 3 | 0 | 3 |
| ISC | 255 | Engineering Economy | 2 | 2 | 3 |
| MAT | 162 | College Trigonometry | 3 | 0 | 3 |
| MEC | 161 | Manufacturing Processes I | 3 | 0 | 3 |
| | | | 14 | 7 | 17 |

| SUMMER TERM | | | | | |
|---|---|---|---|---|---|
| DFT | 112 | Technical Drafting II | 2 | 6 | 4 |
| MEC | 110 | Intro to CAD/CAM | 1 | 2 | 2 |
| | | | 3 | 8 | 6 |

**SECOND YEAR**

| FALL SEMESTER | | | | | |
|---|---|---|---|---|---|
| HYD | 110 | Hydraulics and Pneumatics | 2 | 2 | 3 |
| ISC | 112 | Industrial Safety | 2 | 0 | 2 |
| ISC | 221 | Statistical Quality Control | 3 | 0 | 3 |
| MEC | 111 | Machine Processes I | 2 | 3 | 3 |
| MEC | 210 | Strength of Materials | 1 | 2 | 2 |
| | | | 10 | 7 | 13 |

**SPRING SEMESTER**

| | | | | | |
|---|---|---|---|---|---|
| CIS | 115 | Introduction to Prog. & Logic | 2 | 2 | 3 |
| or | | | | | |
| CIS | 120 | Spreadsheet I | 2 | 2 | 3 |
| COM | 231 | Public Speaking | 2 | 0 | 3 |
| DFT | 153 | CAD III | 1 | 3 | 3 |
| DFT | 231 | Jig & Fixture Design | 3 | 2 | 2 |
| PSY | 150 | General Psychology | 3 | 0 | 3 |
| or | | | | | |
| SOC | 210 | Intro to Sociology | 3 | 0 | 3 |
| | | | 11 | 7 | 14 |

**SUMMER TERM**

| | | | | | |
|---|---|---|---|---|---|
| DDF | 221 | Design Drafting Project | 0 | 4 | 2 |
| | | Humanities/Fine Arts Elective | 3 | 0 | 3 |
| | | | 3 | 4 | 5 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 72**

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN NETWORKING TECHNOLOGY (AAS)

The Networking Technology curriculum prepares individuals for employment supporting local- and wide-area networks. Students will learn how to use technologies to provide for data, voice, image, and video communications in business, industry, and education.

Course work includes design, installation, configuration, and management of local- and wide-area network hardware and software. Emphasis is placed on developing proficiency in the use of network management software and the use of hardware such as bridges and routers.

Graduates may find employment in entry-level jobs as local area network managers, network operators, network analysts, and network technicians. Graduates may also be qualified to take certification examinations for various network products, depending on their local program.

# ASSOCIATE IN APPLIED SCIENCE DEGREE IN NETWORKING TECHNOLOGY (AAS)

## Course and Hour Requirements

| Major Courses | | Credit Hours |
|---|---|---|
| CIS | 115 | 3 |
| CIS | 130 | 3 |
| CIS | 145 | 3 |
| CIS | 152 | 3 |
| ELC | 111 | 3 |
| NET | 110 | 3 |
| NET | 120 | 3 |
| NET | 220 | 3 |
| NET | 230 | 3 |
| NET | 240 | 3 |
| NET | 250 | 3 |
| NET | 251 | 3 |
| NET | 260 | 3 |
| NET | 280 | 3 |
| CIS | 245 | 3 |
| CIS | 215 | 3 |
| CSC | 141 | 3 |

**Total Major Hours: 51**

**General Education Courses**

| Courses | | Credit Hours |
|---|---|---|
| **Communications:** | | |
| ENG | 111 | 3 |
| ENG | 112 | 3 |
| COM | 231 | 3 |

**Humanities/Fine Arts: Select one**

| | | |
|---|---|---|
| ART | 111 | 3 |
| ENG | 231 | 3 |
| ENG | 232 | 3 |
| ENG | 233 | 3 |
| ENG | 241 | 3 |
| ENG | 242 | 3 |
| HUM | 122 | 3 |
| HUM | 170 | 3 |
| MUS | 110 | 3 |
| HUM | 211 | 3 |
| PHI | 210 | 3 |
| PHI | 240 | 3 |
| REL | 211 | 3 |
| REL | 212 | 3 |
| REL | 221 | 3 |

**Social/Behavioral Science: Select one**

| | | |
|---|---|---|
| PSY | 150 | 3 |
| SOC | 210 | 3 |

**Natural Science/Mathematics**

| | | |
|---|---|---|
| MAT | 151 | 3 |

**Total General Education Hours: 18**

**Other Required Courses**

| | | |
|---|---|---|
| ACA | 115 | 1 |

**Total Other Required Hours: 1**

## TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 70

**CIS 110 COMPETENCY REQUIRED PRIOR TO ADMISSION TO PROGRAM**

# ASSOCIATE IN APPLIED SCIENCE DEGREE IN NETWORKING TECHNOLOGY (AAS)

## Suggested Sequence of Courses

### FIRST YEAR

| FALL SEMESTER | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| NET | 110 | Data Communications/ Networking | 2 | 2 | 3 |
| ACA | 115 | Success and Study Skills | 0 | 2 | 1 |
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| CIS | 115 | Introduction to Programming & Logic | 2 | 2 | 3 |
| CIS | 130 | Survey of Operating Systems | 2 | 3 | 3 |
| CIS | 215 | Hardware Installation/ Maintenance | 2 | 3 | 3 |
| | | | 11 | 12 | 16 |

### SPRING SEMESTER

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| ENG | 112 | Argument-Based Research | 3 | 0 | 3 |
| COM | 231 | Public Speaking | 3 | 0 | 3 |
| NET | 120 | Network Installation/ Administration I | 2 | 2 | 3 |
| CSC | 141 | Visual C++ | 2 | 3 | 3 |
| CIS | 152 | Database Concepts | 2 | 2 | 3 |
| CIS | 145 | Operating Systems-Single | 2 | 2 | 3 |
| | | | 14 | 9 | 18 |

### SUMMER TERM

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| MAT | 151 | Statistics I | 3 | 0 | 3 |
| ELC | 111 | Introduction to Electricity | 2 | 2 | 3 |
| CIS | 245 | Operating Systems-Multi-User | 2 | 3 | 3 |
| | | | 7 | 5 | 9 |

### SECOND YEAR

| FALL SEMESTER | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| NET | 250 | Advanced Networks I | 2 | 2 | 3 |
| NET | 260 | Internet Development & Support | 3 | 0 | 3 |
| NET | 220 | Network Installation/ Administration II | 2 | 2 | 3 |
| NET | 240 | Network Design | 3 | 0 | 3 |
| | | Humanities/Fine Arts Elective | 3 | 0 | 3 |
| | | | 13 | 4 | 15 |

## SPRING SEMESTER

| | | | | | |
|---|---|---|---|---|---|
| NET | 280 | Networking Project | 1 | 4 | 3 |
| NET | 251 | Advanced Networks II | 2 | 2 | 3 |
| NET | 230 | Wide Area Networking | 2 | 2 | 3 |
| PSY | 150 | General Psychology | 3 | 0 | 3 |
| or | | | | | |
| SOC | 210 | Introduction to Sociology | 3 | 0 | 3 |
| | | | 8 | 8 | 12 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 70**

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN OFFICE SYSTEMS TECHNOLOGY (AAS)

The Office Systems Technology curriculum prepares individuals for positions in administrative support careers. It equips office professional to respond to the demands of a dynamic computerized workplace.

Students will complete courses designed to develop proficiency in the use of integrated software, oral and written communication, analysis and coordination of office duties and systems, and other support topics. Emphasis is placed on non-technical as well as technical skills.

Graduates should qualify for employment in a variety of positions in business, government, and industry. Job classifications range from entry-level to supervisor to middle management.

# ASSOCIATE IN APPLIED SCIENCE DEGREE IN OFFICE SYSTEMS TECHNOLOGY (AAS)

## Course and Hour Requirements

| Major Courses | | Credit Hours |
|---|---|---|
| OST | 131 | 2 |
| OST | 134 | 4 |
| OST | 136 | 2 |
| OST | 164 | 3 |
| OST | 289 | 3 |
| OST | 137 | 2 |
| OST | 135 | 4 |
| BUS | 121 | 3 |
| OST | 184 | 2 |
| OST | 236 | 3 |
| OST | 181 | 3 |
| CIS | 110 | 3 |
| OST | 223 | 2 |
| ACC | 120 | 4 |
| OST | 233 | 3 |
| OST | 122 | 2 |
| OST | 286 | 2 |
| CIS | 120 | 3 |

**Total Major Hours: 50**

### General Education Courses

| | | Credit Hours |
|---|---|---|
| **Communications:** | | |
| ENG | 111 | 3 |
| COM | 231 | 3 |
| ENG | 112 | 3 |
| or | | |
| ENG | 113 | 3 |

**Humanities/Fine Arts: Select one**

| | | |
|---|---|---|
| ART | 111 | 3 |
| ENG | 231 | 3 |
| ENG | 232 | 3 |
| ENG | 233 | 3 |
| ENG | 241 | 3 |
| ENG | 242 | 3 |
| HUM | 122 | 3 |
| HUM | 170 | 3 |
| HUM | 211 | 3 |
| MUS | 110 | 3 |
| PHI | 210 | 3 |
| PHI | 240 | 3 |
| REL | 211 | 3 |
| REL | 212 | 3 |
| REL | 221 | 3 |

**Social/Behavioral Science: Select one**

| | | |
|---|---|---|
| PSY | 150 | 3 |
| SOC | 210 | 3 |

**Natural Science/Mathematics: Select one**

| | | |
|---|---|---|
| MAT | 161 | 3 |
| MAT | 140 | 3 |
| MAT | 151 | 3 |

**Total General Education Hours: 18**

**Other Required Courses**

| | | |
|---|---|---|
| ACA | 115 | 1 |

**Total Other Required Hours: 1**

## TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 69

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN OFFICE SYSTEMS TECHNOLOGY (AAS)

### Suggested Sequence of Courses

**FIRST YEAR**

| FALL SEMESTER | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| ACA | 115 | Success and Study Skills | 0 | 2 | 1 |
| OST | 131 | Keyboarding | 1 | 2 | 2 |
| CIS | 110 | Introduction to Computers | 2 | 2 | 3 |
| OST | 164 | Text Editing Applications | 3 | 0 | 3 |
| BUS | 121 | Business Mathematics | 2 | 2 | 3 |
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| | | | 11 | 8 | 15 |

| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| OST | 134 | Text Entry and Formatting | 3 | 2 | 4 |
| OST | 184 | Records Management | 1 | 2 | 2 |
| ENG | 112 | Argument-Based Research | 3 | 0 | 3 |
| or | | | | | |
| ENG | 113 | Literature-Based Research | 3 | 0 | 3 |
| OST | 181 | Introduction to Office Systems | 3 | 0 | 3 |
| OST | 137 | Office Software Applications | 1 | 2 | 2 |
| MAT | 140 | Survey of Mathematics | 3 | 0 | 3 |
| or | | | | | |
| MAT | 161 | College Algebra | 3 | 0 | 3 |
| | | | 14 | 6 | 17 |

**SECOND YEAR**

| FALL SEMESTER | | | | | |
|---|---|---|---|---|---|
| OST | 135 | Advanced Text Entry & Format | 3 | 2 | 4 |
| ACC | 120 | Principles of Accounting I | 3 | 2 | 4 |
| COM | 231 | Public Speaking | 3 | 0 | 3 |
| OST | 136 | Word Processing | 1 | 2 | 2 |
| OST | 223 | Machine Transcription I | 1 | 2 | 2 |
| | | Humanities/Fine Arts Elective | 3 | 0 | 3 |
| | | | 14 | 8 | 18 |

| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| OST | 233 | Office Publications Designs | 2 | 2 | 3 |
| OST | 286 | Professional Development | 2 | 0 | 2 |
| CIS | 120 | Spreadsheet I | 2 | 2 | 3 |
| OST | 236 | Advanced Word/Information Processing | 2 | 2 | 3 |
| PSY | 150 | General Psychology | 3 | 0 | 3 |
| or | | | | | |
| SOC | 210 | Introduction to Sociology | 3 | 0 | 3 |
| OST | 122 | Office Computations | 1 | 2 | 2 |
| OST | 289 | Office Systems Management | 2 | 2 | 3 |
| | | | 14 | 10 | 19 |

## TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 69

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN
## OFFICE SYSTEMS TECHNOLOGY - MEDICAL (AAS)

Medical is a concentration under the curriculum title of Office Systems Technology. This curriculum prepares individuals for entry-level positions in medical and allied health facilities. Jobs include transcription, secretary, hospital unit secretary, records clerk, insurance form preparer, patient accounting clerk, and clinical technician.

Course work includes processing, compiling, recording, and maintaining medical records; utilizing office equipment and software; medical law and ethics; billing and coding; and transcribing medical documents.

Employment opportunities include the offices of allied health facilities, HMOs, Insurance claims processors, laboratories, and manufacturers and supplies of medical and hospital equipment.

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN OFFICE SYSTEMS TECHNOLOGY - MEDICAL (AAS)

### Course and Hour Requirements

| Major Courses | | Credit Hours |
|---|---|---|
| OST | 131 | 2 |
| OST | 134 | 4 |
| OST | 136 | 2 |
| OST | 164 | 3 |
| OST | 289 | 3 |
| OST | 137 | 2 |
| OST | 148 | 3 |
| OST | 241 | 2 |
| OST | 243 | 3 |
| OST | 149 | 2 |
| MED | 121 | 3 |
| MED | 122 | 3 |
| OST | 135 | 4 |
| BUS | 121 | 3 |
| OST | 184 | 2 |
| OST | 242 | 2 |
| ACC | 120 | 4 |
| OST | 286 | 2 |

**Total Major Hours: 49**

| General Education Courses | | Credit Hours |
|---|---|---|
| **Communications:** | | |
| ENG | 111 | 3 |
| COM | 231 | 3 |
| ENG | 112 | 3 |
| or | | |
| ENG | 113 | 3 |

**Humanities/Fine Arts: Select one**

| | | |
|---|---|---|
| ART | 111 | 3 |
| ENG | 231 | 3 |
| ENG | 232 | 3 |
| ENG | 233 | 3 |
| ENG | 241 | 3 |
| ENG | 242 | 3 |
| HUM | 122 | 3 |
| HUM | 170 | 3 |
| HUM | 211 | 3 |
| MUS | 110 | 3 |
| PHI | 210 | 3 |
| PHI | 240 | 3 |
| REL | 211 | 3 |
| REL | 212 | 3 |
| REL | 221 | 3 |

**Social/Behavioral Science: Select one**

| | | |
|---|---|---|
| PSY | 150 | 3 |
| SOC | 210 | 3 |

**Natural Science/Mathematics: Select one**

| | | |
|---|---|---|
| MAT | 161 | 3 |
| MAT | 140 | 3 |
| MAT | 151 | 3 |

**Total General Education Hours: 18**

**Other Required Courses**

| | | |
|---|---|---|
| ACA | 115 | 1 |

**Total Other Required Hours: 1**

## TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 68

# ASSOCIATE IN APPLIED SCIENCE DEGREE IN OFFICE SYSTEMS TECHNOLOGY - MEDICAL (AAS)

## Suggested Sequence of Courses

**FIRST YEAR**

| FALL SEMESTER | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| ACA | 115 | Success and Study Skills | 0 | 2 | 1 |
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| OST | 131 | Keyboarding | 1 | 2 | 2 |
| BUS | 121 | Business Mathematics | 2 | 2 | 3 |
| MED | 121 | Medical Terminology I | 3 | 0 | 3 |
| OST | 164 | Text Editing Applications | 3 | 0 | 3 |
| | | | 12 | 6 | 15 |

| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| OST | 134 | Text Entry and Formatting | 3 | 2 | 4 |
| OST | 184 | Records Management | 1 | 2 | 2 |
| MED | 122 | Medical Terminology II | 3 | 0 | 3 |
| ENG | 112 | Argument-Based Research | 3 | 0 | 3 |
| or | | | | | |
| ENG | 113 | Literature-Based Research | 3 | 0 | 3 |
| PSY | 150 | General Psychology | 3 | 0 | 3 |
| or | | | | | |
| SOC | 210 | Intro to Sociology | 3 | 0 | 3 |
| MAT | 140 | Survey of Mathematics | 3 | 0 | 3 |
| or | | | | | |
| MAT | 151 | Statistics | 3 | 0 | 3 |
| or | | | | | |
| MAT | 161 | College Algebra | 3 | 0 | 3 |
| | | | 16 | 4 | 18 |

**SECOND YEAR**
**FALL SEMESTER**

| | | | | | |
|---|---|---|---|---|---|
| OST | 135 | Advanced Text Entry & Format | 3 | 2 | 4 |
| ACC | 120 | Principles of Accounting I | 3 | 2 | 4 |
| COM | 231 | Public Speaking | 3 | 0 | 3 |
| OST | 241 | Medical Office Transcription I | 1 | 2 | 2 |
| OST | 136 | Word Processing | 1 | 2 | 2 |
| OST | 148 | Medical Coding, Billing, & Insurance | 3 | 0 | 3 |
| | | | 14 | 8 | 18 |

**SPRING SEMESTER**

| | | | | | |
|---|---|---|---|---|---|
| OST | 242 | Medical Office Transcription II | 1 | 2 | 2 |
| OST | 286 | Professional Development | 2 | 0 | 2 |
| OST | 243 | Medical Office Simulation | 2 | 2 | 3 |
| OST | 149 | Medical Legal Issues | 2 | 0 | 2 |
| OST | 289 | Office Systems Management | 2 | 2 | 3 |
| OST | 137 | Office Software Applications | 1 | 2 | 2 |
| | | Humanities/Fine Arts Elective | 3 | 0 | 3 |
| | | | 13 | 8 | 17 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 68**

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN RADIOGRAPHY (AAS)

The Radiography curriculum prepares the graduate to be a radiographer, a skilled health care professional who uses radiation to produce images of the human body.

Course work includes clinical rotations to area health care facilities, radiographic exposure, image processing, radiographic procedures, physics, pathology, patient care and management, radiation protection, quality assurance, anatomy and physiology, and radiobiology.

Graduates of accredited programs are eligible to apply to take the American Registry of Radiologic Technologists' national examination for certification and registration as medical radiographers. Graduates may be employed in hospitals, clinics, physicians' offices, medical laboratories, government agencies, and industry.

# ASSOCIATE IN APPLIED SCIENCE DEGREE IN RADIOGRAPHY (AAS)

## Course and Hour Requirements

| Major Courses | | Credit Hours |
|---|---|---|
| RAD | 110 | 3 |
| RAD | 111 | 4 |
| RAD | 112 | 4 |
| RAD | 121 | 3 |
| RAD | 122 | 2 |
| RAD | 131 | 2 |
| RAD | 151 | 2 |
| RAD | 161 | 5 |
| RAD | 171 | 4 |
| RAD | 211 | 3 |
| RAD | 231 | 2 |
| RAD | 241 | 2 |
| RAD | 245 | 3 |
| RAD | 251 | 7 |
| RAD | 261 | 7 |
| BIO | 163 | 5 |

**Total Major Hours: 58**

| General Education Courses | | Credit Hours |
|---|---|---|
| **Communications:** | | |
| ENG | 111 | 3 |
| COM | 231 | 3 |
| | | |
| **Humanities/Fine Arts: Select one** | | |
| ART | 111 | 3 |
| ENG | 231 | 3 |
| ENG | 232 | 3 |
| ENG | 233 | 3 |
| ENG | 241 | 3 |
| ENG | 242 | 3 |
| HUM | 122 | 3 |
| HUM | 170 | 3 |
| HUM | 211 | 3 |
| MUS | 110 | 3 |
| PHI | 210 | 3 |
| PHI | 240 | 3 |
| REL | 211 | 3 |
| REL | 212 | 3 |
| REL | 221 | 3 |
| | | |
| **Social/Behavioral Science** | | |
| PSY | 150 | 3 |
| | | |
| **Natural Science/Mathematics** | | |
| MAT | 161 | 3 |

**Total General Education Hours: 15**

| Other Required Courses | | |
|---|---|---|
| CIS | 110 | 3 |

**Total Other Required Hours: 3**

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 76**

# ASSOCIATE IN APPLIED SCIENCE DEGREE IN RADIOGRAPHY (AAS)

## Suggested Sequence of Courses

### FIRST YEAR

| FALL SEMESTER | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| RAD | 110 | Radiography Intro & Patient Care | 2 | 3 | 3 |
| RAD | 111 | Radiographic Procedures I | 3 | 3 | 4 |
| RAD | 151 | Radiographic Clinical Education I | 0 | 6 | 2 |
| BIO | 163 | Basic Anatomy and Physiology | 4 | 2 | 5 |
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| | | | 12 | 14 | 17 |

| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| RAD | 112 | Radiographic Procedures II | 3 | 3 | 4 |
| RAD | 121 | Radiographic Imaging I | 2 | 3 | 3 |
| RAD | 161 | Radiographic Clinical Education II | 0 | 15 | 5 |
| CIS | 110 | Intro to Computers | 2 | 2 | 3 |
| COM | 231 | Public Speaking | 3 | 0 | 3 |
| | | | 10 | 23 | 18 |

| SUMMER TERM | | | | | |
|---|---|---|---|---|---|
| RAD | 122 | Radiographic Imaging II | 1 | 3 | 2 |
| RAD | 131 | Radiographic Physics I | 1 | 3 | 2 |
| RAD | 171 | Radiographic Clinical Education III | 0 | 12 | 4 |
| MAT | 161 | College Algebra | 3 | 0 | 3 |
| | | | 5 | 18 | 11 |

### SECOND YEAR

| FALL SEMESTER | | | | | |
|---|---|---|---|---|---|
| RAD | 251 | Radiographic Clinical Education IV | 0 | 21 | 7 |
| RAD | 211 | Radiographic Procedures III | 2 | 3 | 3 |
| RAD | 231 | Radiographic Physics II | 1 | 3 | 2 |
| RAD | 241 | Radiographic Protection | 2 | 0 | 2 |
| PSY | 150 | Intro to Psychology | 3 | 0 | 3 |
| | | | 8 | 27 | 17 |

| SPRING SEMESTER | | | | | |
|---|---|---|---|---|---|
| RAD | 245 | Radiographic Analysis | 2 | 3 | 3 |
| RAD | 261 | Radiographic Clinical Education V | 0 | 21 | 7 |
| | | Humanities/Fine Art Elective | 3 | 0 | 3 |
| | | | 5 | 24 | 13 |

## TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 76

# ONE-YEAR DIPLOMA PROGRAMS

# DIPLOMA
# AIR CONDITIONING, HEATING
# AND REFRIGERATION TECHNOLOGY

Air Conditioning, Heating, and Refrigeration Technology curriculum, provides the basic knowledge to develop skills necessary to work with residential and light commercial systems.

Topics include mechanical refrigeration, heating and cooling theory, electricity, controls, and safety. The diploma program covers air conditioning, furnaces, heat pumps, tools and instruments. In addition, the A.A.S. degree covers residential building codes, residential system sizing, and advanced comfort systems.

Diploma graduates should be able to assist in the start up, preventive maintenance, service, repair, and/or installation of residential and light commercial systems. A.A.S. degree graduates should be able to demonstrate an understanding of system selection and balance, and advanced systems.

# DIPLOMA
# AIR CONDITIONING, HEATING
# AND REFRIGERATION TECHNOLOGY

## Course and Hour Requirements

| Major Courses | | Credit Hours | General Education Courses | | Credit Hours |
|---|---|---|---|---|---|
| AHR | 110 | 5 | **Communications:** | | |
| AHR | 112 | 4 | ENG | 101 | 3 |
| AHR | 113 | 4 | | | |
| AHR | 114 | 4 | **Mathematics:** | | |
| AHR | 111 | 3 | MAT | 101 | 3 |
| AHR | 160 | 1 | | | |
| AHR | 130 | 3 | **Total General Education Hours: 6** | | |
| AHR | 133 | 4 | | | |
| AHR | 210 | 2 | | | |
| AHR | 211 | 3 | | | |
| AHR | 151 | 2 | | | |

**Total Major Hours: 35**

**TOTAL SEMESTER HOURS CREDIT: 41**

# DIPLOMA
# AIR CONDITIONING, HEATING
# AND REFRIGERATION TECHNOLOGY

## Suggested Sequence of Courses
## Day Sequence

|  | | | HOURS | | |
|---|---|---|---|---|---|
| **FALL SEMESTER** | | | **CLASS** | **LAB** | **CREDIT** |
| MAT | 101 | Applied Mathematics I | 2 | 2 | 3 |
| AHR | 110 | Intro to Refrigeration | 2 | 6 | 5 |
| AHR | 111 | HVAC Electricity | 2 | 2 | 3 |
| AHR | 113 | Comfort Cooling | 2 | 4 | 4 |
| AHR | 160 | Refrigerant Certification | 1 | 0 | 1 |
| | | | 9 | 14 | 16 |
| **SPRING SEMESTER** | | | | | |
| AHR | 114 | Heat Pump Technology | 2 | 4 | 4 |
| AHR | 112 | Heat Technology | 2 | 4 | 4 |
| AHR | 130 | HVAC Controls | 2 | 2 | 3 |
| AHR | 211 | Residential System Design | 2 | 2 | 3 |
| ENG | 101 | Applied Communications I | 3 | 0 | 3 |
| | | | 11 | 12 | 17 |
| **SUMMER TERM** | | | | | |
| AHR | 133 | HVAC Servicing | 2 | 6 | 4 |
| AHR | 151 | HVAC Duct Systems I | 1 | 3 | 2 |
| AHR | 210 | Residential Building Code | 1 | 2 | 2 |
| | | | 4 | 11 | 8 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 41**

# DIPLOMA
# AIR CONDITIONING, HEATING
# AND REFRIGERATION TECHNOLOGY

## Suggested Sequence of Courses
## Night Sequence

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| **FALL SEMESTER** | | | | | |
| MAT | 101 | Applied Mathematics I | 2 | 2 | 3 |
| AHR | 110 | Intro to Refrigeration | 2 | 6 | 5 |
| | | | 4 | 8 | 8 |
| **SPRING SEMESTER** | | | | | |
| AHR | 111 | HVAC Electricity | 2 | 2 | 3 |
| AHR | 113 | Comfort Cooling | 2 | 4 | 4 |
| | | | 4 | 6 | 7 |
| **SUMMER TERM** | | | | | |
| AHR | 112 | Heat Technology | 2 | 4 | 4 |
| AHR | 151 | HVAC Duct Systems I | 1 | 3 | 2 |
| AHR | 160 | Refrigerant Certification | 1 | 0 | 1 |
| | | | 4 | 7 | 7 |
| **SECOND YEAR** | | | | | |
| **FALL SEMESTER** | | | | | |
| AHR | 114 | Heat Pump Technology | 2 | 4 | 4 |
| ENG | 101 | Applied Communications I | 3 | 0 | 3 |
| | | | 5 | 4 | 7 |
| **SPRING SEMESTER** | | | | | |
| AHR | 130 | HVAC Controls | 2 | 2 | 3 |
| AHR | 211 | Residential Systems Design | 2 | 2 | 3 |
| AHR | 210 | Residential Building Code | 1 | 2 | 2 |
| | | | 5 | 6 | 8 |
| **SUMMER TERM** | | | | | |
| AHR | 133 | HVAC Servicing | 2 | 6 | 4 |

The column header **HOURS** spans CLASS, LAB, CREDIT.

## TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 41

# DIPLOMA
# AUTOBODY REPAIR

The Autobody Repair curriculum provides training in the use of equipment and materials of the autobody repair trade. The student studies the construction of the automobile body and techniques of autobody repairing, rebuilding, and refinishing.

The course work includes autobody fundamentals, industry overview, and safety. Students will perform hands-on repairs in the areas of non-structural repairs, mig welding, plastics and adhesives, refinishing, and other related areas.

Graduates of the curriculum should qualify for entry-level employment opportunities in the automotive body and refinishing industry. Graduates may find employment with franchised independent garages, or they may become self-employed.

# DIPLOMA34
# AUTOBODY REPAIR

## Course and Hour Requirements

| Major Courses | | Credit Hours | General Education Courses | | Credit Hours |
|---|---|---|---|---|---|
| AUB | 111 | 4 | **Communications:** | | |
| AUB | 121 | 3 | ENG | 101 | 3 |
| AUB | 131 | 4 | | | |
| AUB | 134 | 3 | | | |
| AUB | 136 | 3 | **Mathematics:** | | |
| AUB | 112 | 4 | MAT | 101 | 3 |
| AUB | 122 | 4 | | | |
| AUB | 132 | 4 | **Total General Education Hours: 6** | | |
| AUB | 114 | 2 | | | |
| AUB | 162 | 2 | | | |

**Total Major Hours: 33**

**TOTAL SEMESTER HOURS CREDIT: 39**

# DIPLOMA
# AUTOBODY REPAIR

## Suggested Sequence of Courses
## Day Sequence

| FALL SEMESTER | | | CLASS | HOURS<br>LAB | CREDIT |
|---|---|---|---|---|---|
| MAT | 101 | Applied Mathematics I | 2 | 2 | 3 |
| AUB | 111 | Painting and Refinishing I | 2 | 6 | 4 |
| AUB | 121 | Non-Structural Damage I | 1 | 4 | 3 |
| AUB | 131 | Structural Damage I | 2 | 4 | 4 |
| AUB | 134 | Autobody MIG Welding I | 1 | 4 | 3 |
| | | | 8 | 20 | 17 |
| **SPRING SEMESTER** | | | | | |
| AUB | 112 | Painting and Refinishing II | 2 | 6 | 4 |
| AUB | 122 | Non-Structural Damage II | 2 | 6 | 4 |
| AUB | 132 | Structural Damage II | 2 | 6 | 4 |
| ENG | 101 | Applied Communications I | 3 | 0 | 3 |
| | | | 9 | 18 | 15 |
| **SUMMER TERM** | | | | | |
| AUB | 114 | Special Finishes | 1 | 2 | 2 |
| AUB | 136 | Plastics and Adhesives | 1 | 4 | 3 |
| AUB | 162 | Autobody Estimating | 1 | 2 | 2 |
| | | | 3 | 8 | 7 |

## TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 39

# DIPLOMA
# AUTOBODY REPAIR

## Suggested Sequence of Courses
## Night Sequence

| | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| **FIRST YEAR** | | | | **HOURS** | |
| **FALL SEMESTER** | | | | | |
| AUB | 111 | Painting and Refinishing I | 2 | 6 | 4 |
| AUB | 121 | Non-Structural Damage I | 1 | 4 | 3 |
| | | | 3 | 10 | 7 |
| **SPRING SEMESTER** | | | | | |
| AUB | 112 | Painting and Refinishing II | 2 | 6 | 4 |
| AUB | 122 | Non-Structural Damage II | 2 | 6 | 4 |
| | | | 4 | 12 | 8 |
| **SUMMER TERM** | | | | | |
| AUB | 114 | Special Finishes | 1 | 2 | 2 |
| AUB | 162 | Autobody Estimating | 1 | 2 | 2 |
| | | | 2 | 4 | 4 |
| **SECOND YEAR** | | | | | |
| **FALL SEMESTER** | | | | | |
| AUB | 131 | Structural Damage I | 2 | 4 | 4 |
| AUB | 134 | Autobody MIG Welding | 1 | 4 | 3 |
| MAT | 101 | Applied Math I | 2 | 2 | 3 |
| | | | 5 | 10 | 10 |
| **SPRING SEMESTER** | | | | | |
| AUB | 132 | Structural Damage II | 2 | 6 | 4 |
| ENG | 101 | Applied Communications I | 3 | 0 | 3 |
| | | | 5 | 6 | 7 |
| **SUMMER TERM** | | | | | |
| AUB | 136 | Plastic and Adhesives | 1 | 4 | 3 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 39**

# DIPLOMA
# BROADCASTING AND PRODUCTION TECHNOLOGY

The Broadcasting and Production Technology curriculum provides the individual with knowledge and hands on experience to enter the communications field. This objective is fulfilled through technical and program experience in various aspects of media production.

# DIPLOMA
# BROADCASTING AND PRODUCTION TECHNOLOGY

## Course and Hour Requirements

| Major Courses | | Credit Hours | General Education Courses | | Credit Hours |
|---|---|---|---|---|---|
| BPT | 110 | 3 | **Communications:** | | |
| BPT | 111 | 3 | ENG | 111 | 3 |
| BPT | 140 | 2 | ENG | 112 | 3 |
| BPT | 231 | 4 | or | | |
| BPT | 255 | 3 | ENG | 113 | 3 |
| BPT | 112 | 4 | | | |
| BPT | 113 | 3 | | | |
| BPT | 232 | 4 | **Total General Education Hours: 6** | | |
| BPT | 250 | 3 | | | |
| BPT | 235 | 2 | | | |

**Total Major Hours: 31**

**TOTAL SEMESTER HOURS CREDIT: 37**

# DIPLOMA
# BROADCASTING AND PRODUCTION TECHNOLOGY

## Suggested Sequence of Courses
## Day Sequence

| FALL SEMESTER | | | HOURS CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| BPT | 110 | Intro to Broadcasting | 3 | 0 | 3 |
| BPT | 111 | Broadcast Law & Ethics | 3 | 0 | 3 |
| BPT | 140 | Intro to TV Systems | 2 | 0 | 2 |
| ENG | 111 | Expository Writing | 3 | 0 | 3 |
| BPT | 231 | Video/TV Production I | 2 | 6 | 4 |
| BPT | 255 | Computer-Based Production | 2 | 3 | 3 |
| | | | 15 | 9 | 18 |
| **SPRING SEMESTER** | | | | | |
| BPT | 112 | Broadcast Writing | 3 | 2 | 4 |
| BPT | 113 | Broadcast Sales | 3 | 0 | 3 |
| BPT | 232 | Video TV Production II | 2 | 6 | 4 |
| BPT | 250 | Institutional Video | 2 | 3 | 3 |
| ENG | 112 | Argument-Based Research | 3 | 0 | 3 |
| or | | | | | |
| ENG | 113 | Literature-Based Research | 3 | 0 | 3 |
| | | | 13 | 11 | 17 |
| **SUMMER TERM** | | | | | |
| BPT | 235 | TV Production I | 0 | 6 | 2 |

## TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 37

# DIPLOMA
# CARPENTRY

The Carpentry curriculum is designed to train students to construct residential structures using standard building materials and hand and power tools. Carpentry skills and a general knowledge of residential construction will also be taught.

Course work includes footings and foundations, framing, interior and exterior trim, cabinetry, blueprint reading, residential planning and estimating, and other related topics. Students will develop skills through hands-on participation.

Graduates should qualify for employment in the residential building construction field as rough carpenters, framing carpenters, roofers, maintenance carpenters, and other related job titles.

# DIPLOMA
# CARPENTRY

## Course and Hour Requirements

| Major Courses | | Credit Hours |
|---|---|---|
| BPR | 130 | 2 |
| CAR | 111 | 9 |
| CAR | 112 | 9 |
| CAR | 113 | 6 |
| CAR | 115 | 3 |
| CAR | 114 | 3 |
| CST | 115 | 2 |

**Total Major Hours: 34**

| General Education Courses | | Credit Hours |
|---|---|---|
| **Communications:** | | |
| ENG | 101 | 3 |
| **Mathematics:** | | |
| MAT | 101 | 3 |

**Total General Education Hours: 6**

**TOTAL SEMESTER HOURS CREDIT: 40**

# DIPLOMA
# CARPENTRY

## Suggested Sequence of Courses
## Day Sequence

| | | | HOURS | | |
|---|---|---|---|---|---|
| **FALL SEMESTER** | | | **CLASS** | **LAB** | **CREDIT** |
| CAR | 112 | Carpentry II | 4 | 15 | 9 |
| ENG | 101 | Applied Communications I | 3 | 0 | 3 |
| CAR | 115 | Residential Planning/Estim | 3 | 0 | 3 |
| | | | 10 | 15 | 15 |
| **SPRING SEMESTER** | | | | | |
| CAR | 113 | Carpentry III | 3 | 9 | 6 |
| MAT | 101 | Applied Mathematics I | 2 | 2 | 3 |
| CST | 115 | Dry Wall Installation | 1 | 3 | 2 |
| BPR | 130 | Blueprint Reading/Construction | 1 | 2 | 2 |
| | | | 7 | 16 | 13 |
| **SUMMER TERM** | | | | | |
| CAR | 111 | Carpentry I | 4 | 15 | 9 |
| CAR | 114 | Residential Building Codes | 3 | 0 | 3 |
| | | | 7 | 15 | 12 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 40**

# DIPLOMA
# CARPENTRY

## Suggested Sequence of Courses
## Night Sequence

| FIRST YEAR | | | HOURS | | |
|---|---|---|---|---|---|
| **FALL SEMESTER** | | | **CLASS** | **LAB** | **CREDIT** |
| CAR | 112A | Carpentry II | 2 | 8 | 5 |
| CAR | 115 | Residential Planning/Estim | 3 | 0 | 3 |
| | | | 5 | 8 | 8 |
| | | | | | |
| **SPRING SEMESTER** | | | | | |
| CAR | 112B | Carpentry II | 2 | 7 | 4 |
| ENG | 101 | Applied Communications I | 3 | 0 | 3 |
| | | | 5 | 7 | 7 |
| | | | | | |
| **SUMMER TERM** | | | | | |
| CST | 115 | Dry Wall Installation | 1 | 3 | 2 |
| BPR | 130 | Blueprint Reading/Construction | 1 | 2 | 2 |
| MAT | 101 | Applied Mathematics I | 2 | 2 | 3 |
| | | | 4 | 7 | 7 |
| | | | | | |
| **SECOND YEAR** | | | | | |
| **FALL SEMESTER** | | | | | |
| CAR | 113 | Carpentry III | 3 | 9 | 6 |
| | | | | | |
| **SPRING SEMESTER** | | | | | |
| CAR | 111A | Carpentry I | 2 | 8 | 5 |
| CAR | 114 | Residential Building Codes | 3 | 0 | 3 |
| | | | 5 | 8 | 8 |
| | | | | | |
| **SUMMER TERM** | | | | | |
| CAR | 111B | Carpentry I | 2 | 7 | 4 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 40**

## DIPLOMA
## COSMETOLOGY

The Cosmetology curriculum is designed to provide competency-based knowledge, scientific/artistic principles, and hands-on fundamentals associated with the cosmetology industry. The curriculum provides a simulated salon environment which enables students to develop manipulative skills.

Course work includes instruction in all phases of professional imaging, hair design, chemical processes, skin care, nail care, multi-cultural practices, business/computer principles, product knowledge, and other selected topics.

Graduates should qualify to sit for the State Board of Cosmetic Arts examination. Upon successfully passing the State Board exam, graduates will be issued a license. Employment is available in beauty salons and as skin/nail specialists, platform artists, and related businesses.

# DIPLOMA
# COSMETOLOGY

## Course and Hour Requirements

| Major Courses | | Credit Hours | General Education Courses | | Credit Hours |
|---|---|---|---|---|---|
| COS | 111 | 4 | **Communications:** | | |
| COS | 112 | 8 | ENG | 101 | 3 |
| COS | 113 | 4 | | | |
| COS | 114 | 8 | **Mathematics:** | | |
| COS | 115 | 4 | MAT | 101 | 3 |
| COS | 116 | 4 | | | |
| COS | 117 | 2 | **Total General Education Hours: 6** | | |
| COS | 118 | 7 | | | |

**Total Major Hours: 41**

### TOTAL SEMESTER HOURS CREDIT: 47

# DIPLOMA
# COSMETOLOGY

## Suggested Sequence of Courses

| | | | HOURS | | |
|---|---|---|---|---|---|
| **FALL SEMESTER** | | | **CLASS** | **LAB** | **CREDIT** |
| COS | 111 | Cosmetology Concepts I | 4 | 0 | 4 |
| COS | 112 | Salon I | 0 | 24 | 8 |
| ENG | 101 | Applied Communications I | 3 | 0 | 3 |
| | | | 7 | 24 | 15 |
| **SPRING SEMESTER** | | | | | |
| COS | 113 | Cosmetology Concepts II | 4 | 0 | 4 |
| COS | 114 | Salon II | 0 | 24 | 8 |
| MAT | 101 | Applied Mathematics I | 3 | 0 | 3 |
| | | | 7 | 24 | 15 |
| **SUMMER TERM** | | | | | |
| COS | 115 | Cosmetology Concepts III | 4 | 0 | 4 |
| COS | 116 | Salon III | 0 | 12 | 4 |
| COS | 117 | Cosmetology Concepts IV | 2 | 0 | 2 |
| COS | 118 | Salon IV | 0 | 21 | 7 |
| | | | 6 | 33 | 17 |

### TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 47

### TOTAL CONTACT HOURS REQUIRED BY NORTH CAROLINA STATE BOARD OF COSMETIC EXAMINERS: 1500

# DIPLOMA
## ELECTRICAL/ELECTRONICS TECHNOLOGY

The Electrical/Electronics Technology curriculum is designed to provide training for persons interested in the installation and maintenance of electrical/electronic systems found in residential, commercial and industrial facilities.

Training, most of which is hands-on, will include such topics as AC/DC theory, basic wiring practices, digital electronics, programmable logic controllers, industrial motor controls, the National Electric Code, and other subjects as local needs require.

Graduates should qualify for a variety of jobs in the electrical/electronics field as an on-the-job trainee or apprentice, assisting in the layout, installation, and maintenance of electrical/electronic systems.

# DIPLOMA
## ELECTRICAL/ELECTRONICS TECHNOLOGY

### Course and Hour Requirements

| Major Courses | | Credit Hours | General Education Courses | | Credit Hours |
|---|---|---|---|---|---|
| ELC | 112 | 5 | **Communications:** | | |
| ELC | 113 | 4 | ENG | 101 | 3 |
| ELC | 117 | 4 | | | |
| ELC | 114 | 4 | | | |
| ELN | 131 | 4 | **Mathematics:** | | |
| ELC | 115 | 4 | MAT | 101 | 3 |
| ELN | 133 | 4 | | | |
| ELC | 128 | 3 | **Total General Education Hours: 6** | | |
| ELC | 118 | 2 | | | |
| ELC | 119 | 2 | | | |

**Total Major Hours: 36**

**TOTAL SEMESTER HOURS CREDIT: 42**

# DIPLOMA
# ELECTRICAL/ELECTRONICS TECHNOLOGY

## Suggested Sequence of Courses
## Day Sequence

|  |  |  | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| **FALL SEMESTER** |  |  |  |  |  |
| ELC | 112 | DC/AC Electricity | 3 | 6 | 5 |
| ELC | 113 | Basic Wiring I | 2 | 6 | 4 |
| ELN | 133 | Digital Electronics | 3 | 3 | 4 |
| MAT | 101 | Applied Mathematics I | 2 | 2 | 3 |
|  |  |  | 0 | 17 | 16 |
| **SPRING SEMESTER** |  |  |  |  |  |
| ELC | 114 | Basic Wiring II | 2 | 6 | 4 |
| ELC | 115 | Industrial Wiring | 2 | 6 | 4 |
| ELC | 117 | Motors and Controls | 2 | 6 | 4 |
| ELN | 131 | Electronic Devices | 3 | 3 | 4 |
|  |  |  | 9 | 21 | 16 |
| **SUMMER TERM** |  |  |  |  |  |
| ELC | 128 | Introduction to PLC | 2 | 3 | 3 |
| ELC | 118 | National Electric Code | 1 | 2 | 2 |
| ELC | 119 | National Electric Code Calculations | 1 | 2 | 2 |
| ENG | 101 | Applied Communications I | 3 | 0 | 3 |
|  |  |  | 7 | 7 | 10 |

The HOURS column spans CLASS, LAB, CREDIT.

## TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 42

# DIPLOMA
# ELECTRICAL/ELECTRONICS TECHNOLOGY

## Suggested Sequence of Courses
## Night Sequence

| FIRST YEAR | | | HOURS | | |
|---|---|---|---|---|---|
| **FALL SEMESTER** | | | **CLASS** | **LAB** | **CREDIT** |
| ELC | 112 | DC/AC Electricity | 3 | 6 | 5 |
| MAT | 101 | Applied Mathematics I | 2 | 2 | 3 |
| | | | 5 | 8 | 8 |
| **SPRING SEMESTER** | | | | | |
| ELC | 113 | Basic Wiring I | 2 | 6 | 4 |
| ELN | 131 | Electronic Devices | 3 | 3 | 4 |
| | | | 5 | 9 | 8 |
| **SUMMER TERM** | | | | | |
| ELC | 114 | Basic Wiring II | 2 | 6 | 4 |
| **SECOND YEAR** | | | | | |
| **FALL SEMESTER** | | | | | |
| ELC | 117 | Motors & Controls | 2 | 6 | 4 |
| ELN | 133 | Digital Electronic | 3 | 3 | 4 |
| | | | 5 | 9 | 8 |
| **SPRING SEMESTER** | | | | | |
| ELC | 115 | Industrial Wiring | 2 | 6 | 4 |
| ELC | 118 | National Electric Code | 1 | 2 | 2 |
| ELC | 119 | NEC Calculations | 1 | 2 | 2 |
| | | | 4 | 10 | 8 |
| **SUMMER TERM** | | | | | |
| ELC | 128 | Introduction to PLC | 2 | 3 | 3 |
| ENG | 101 | Applied Communications I | 3 | 0 | 3 |
| | | | 5 | 3 | 6 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 42**

# DIPLOMA
# INDUSTRIAL MAINTENANCE TECHNOLOGY

The Industrial Maintenance Technology curriculum is designed to prepare or upgrade individuals to service, maintain, repair, or install equipment for a wide range of industries. Instruction includes theory and skill training needed for inspecting, testing, troubleshooting, and diagnosing industrial equipment and physical facilities.

Students will learn technical skills in blueprint reading, electricity, hydraulics/pneumatics, machining, welding, and various maintenance procedures. Practical application in these industrial systems will be emphasized and additional advanced course work may be offered.

Upon completion of any of the various levels of this curriculum, graduates should gain the necessary practical skills and related information to qualify for employment or advancement in the various areas of industrial maintenance technology.

# DIPLOMA
# INDUSTRIAL MAINTENANCE TECHNOLOGY

## Course and Hour Requirements

| Major Courses | | Credit Hours |
|---|---|---|
| BPR | 111 | 2 |
| HYD | 110 | 3 |
| MEC | 111 | 3 |
| MNT | 110 | 2 |
| WLD | 112 | 2 |
| ELC | 111 | 3 |

**Choose 17 hrs:**

| | | |
|---|---|---|
| AHR | 110 | 5 |
| AHR | 112 | 4 |
| AHR | 151 | 2 |
| ELC | 115 | 4 |
| ELC | 128 | 3 |
| MEC | 112 | 3 |
| MEC | 165 | 2 |
| MNT | 150 | 2 |
| ELC | 113 | 4 |

**Total Major Hours: 32**

**General Education Courses**    **Credit Hours**

**Communications:**

| | | |
|---|---|---|
| ENG | 101 | 3 |

**Mathematics:**

| | | |
|---|---|---|
| MAT | 101 | 3 |

**Total General Education Hours: 6**

**OTHER REQUIRED COURSES**

| | | |
|---|---|---|
| DFT | 119 | 2 |

**TOTAL SEMESTER HOURS CREDIT: 40**

# DIPLOMA
# INDUSTRIAL MAINTENANCE TECHNOLOGY

## Suggested Sequence of Courses
## Day Sequence

| | | | HOURS | | |
|---|---|---|---|---|---|
| **FALL SEMESTER** | | | **CLASS** | **LAB** | **CREDIT** |
| *AHR | 110 | Introduction to Refrigeration | 2 | 6 | 5 |
| ELC | 111 | Introduction to Electricity | 2 | 2 | 3 |
| BPR | 111 | Blueprint Reading | 1 | 2 | 2 |
| MAT | 101 | Applied Mathematics I | 2 | 2 | 3 |
| HYD | 110 | Hydraulics/Pneumatics I | 2 | 3 | 3 |
| | | | 9 | 15 | 16 |
| **SPRING SEMESTER** | | | | | |
| *AHR | 112 | Heating Technology | 2 | 4 | 4 |
| ELC | 115 | Industrial Wiring | 2 | 6 | 4 |
| *ELC | 113 | Basic Wiring I | 2 | 6 | 4 |
| ENG | 101 | Applied Communications I | 3 | 0 | 3 |
| MNT | 110 | Intro to Maintenance Procedures | 1 | 3 | 2 |
| | | | 10 | 19 | 17 |
| **SUMMER TERM** | | | | | |
| *AHR | 151 | HVAC Duct Systems I | 1 | 3 | 2 |
| *ELC | 128 | Introduction to PLC | 2 | 3 | 3 |
| DFT | 119 | Basic CAD | 1 | 2 | 2 |
| MEC | 111 | Machine Processes I | 2 | 3 | 3 |
| WLD | 112 | Basic Welding | 1 | 3 | 2 |
| | | | 7 | 14 | 12 |

* This course may be taken at this time or you may choose another course from the 17 hour list in the course and hour requirements section listed above.

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 40**

# DIPLOMA
# INDUSTRIAL MAINTENANCE TECHNOLOGY

## Suggested Sequence of Courses
## Night Sequence

**FIRST YEAR**

| FALL SEMESTER | | HOURS CLASS | LAB | CREDIT |
|---|---|---|---|---|
| *AHR 110 | Intro to Refrigeration | 2 | 6 | 5 |
| BPR 111 | Blueprint Reading | 1 | 2 | 2 |
| ELC 111 | Intro to Electricity | 2 | 2 | 3 |
| *ELC 117 | Motors and Controls | 2 | 6 | 4 |
| | | 7 | 16 | 14 |

| SPRING SEMESTER | | | | |
|---|---|---|---|---|
| *ELC 115 | Industrial Wiring | 2 | 6 | 4 |

| SUMMER TERM | | | | |
|---|---|---|---|---|
| *AHR 112 | Heating Technology | 2 | 4 | 4 |
| *AHR 151 | HVAC Duct Systems I | 1 | 3 | 2 |
| | | 3 | 7 | 6 |

**SECOND YEAR**

| FALL SEMESTER | | | | |
|---|---|---|---|---|
| ENG 101 | Applied Communications I | 3 | 0 | 3 |
| MAT 101 | Applied Mathematics I | 2 | 2 | 3 |
| MEC 111 | Machine Processes I | 2 | 3 | 3 |
| HYD 110 | Hydraulics/Pneumatics I | 2 | 3 | 3 |
| | | 9 | 8 | 12 |

| SPRING SEMESTER | | | | |
|---|---|---|---|---|
| MNT 110 | Intro to Maintenance Procedures | 1 | 3 | 2 |
| WLD 112 | Basic Welding Procedures | 1 | 3 | 2 |
| | | 2 | 6 | 4 |

| SUMMER TERM | | | | |
|---|---|---|---|---|
| *ELC 128 | Introduction to PLC | 2 | 3 | 3 |
| DFT 119 | Basic CAD | 1 | 2 | 2 |
| | | 3 | 5 | 5 |

* This course may be taken at this time or you may choose another course from the 17 hour list in the course and hour requirements section listed on the previous page.

MEC 165 (Fab. Techniques 1-3-2) TBA on demand
MNT 150 (Basic Building Maintenance 1-3-2) TBA on demand

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 40**

# DIPLOMA
## MACHINING TECHNOLOGY

The Machining Technology curriculum is designed to develop skills in the theory and safe use of hand tools, power machinery, computerized equipment and sophisticated precision inspection instruments.

Students will learn to interpret blueprints, set up manual and CNC machines, perform basic and advanced machining operations and make decisions to insure that work quality is maintained.

Employment opportunities for machining technicians exist in manufacturing industries, public institutions, governmental agencies and in a wide range of specialty machining job shops.

# DIPLOMA
# MACHINING TECHNOLOGY

## Course and Hour Requirements

| Major Courses | | Credit Hours | General Education | | |
|---|---|---|---|---|---|
| MAC | 111 | 6 | Courses | | Credit Hours |
| MAC | 112 | 6 | Communications: | | |
| MAC | 113 | 6 | ENG | 101 | 3 |
| BPR | 111 | 2 | | | |
| BPR | 121 | 2 | Mathematics: | | |
| MAC | 122 | 2 | MAT | 101 | 3 |
| MAC | 124 | 2 | | | |
| MEC | 110 | 2 | **Total General Education Hours: 6** | | |
| WLD | 112 | 2 | | | |

**Total Major Hours: 30**

**TOTAL SEMESTER HOURS CREDIT: 36**

# DIPLOMA
# MACHINING TECHNOLOGY

## Suggested Sequence of Courses
## Day Sequence

| | | | HOURS | | |
|---|---|---|---|---|---|
| **FALL SEMESTER** | | | **CLASS** | **LAB** | **CREDIT** |
| MAC | 111 | Machine Technology I | 2 | 12 | 6 |
| WLD | 112 | Basic Welding Processes | 1 | 3 | 2 |
| BPR | 111 | Blueprint Reading | 1 | 2 | 2 |
| MAT | 101 | Applied Mathematics I | 2 | 2 | 3 |
| | | | 6 | 19 | 13 |
| **SPRING SEMESTER** | | | | | |
| MAC | 112 | Machine Technology II | 2 | 12 | 6 |
| MAC | 122 | CNC Turning | 1 | 3 | 2 |
| BPR | 121 | Blueprint Reading: Mech | 1 | 2 | 2 |
| ENG | 101 | Applied Communications I | 3 | 0 | 3 |
| | | | 7 | 17 | 13 |
| **SUMMER TERM** | | | | | |
| MAC | 113 | Machine Technology III | 2 | 12 | 6 |
| MAC | 124 | CNC Milling | 1 | 3 | 2 |
| MEC | 110 | Intro to CAD/CAM | 1 | 2 | 2 |
| | | | 4 | 17 | 10 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 36**

# DIPLOMA
# MACHINING TECHNOLOGY

## Suggested Sequence of Courses
## Night Sequence

| FIRST YEAR | | | HOURS | |
|---|---|---|---|---|
| **FALL SEMESTER** | | CLASS | LAB | CREDIT |
| MAC 111A Machine Technology I | 1 | 6 | 3 |
| MAT 101 Applied Mathematics I | 2 | 2 | 3 |
| BPR 111 Blueprint Reading | 1 | 2 | 2 |
| | 4 | 10 | 8 |

| **SPRING SEMESTER** | | | |
|---|---|---|---|
| MAC 111B Machine Technology I | 1 | 6 | 3 |
| ENG 101 Applied Communications I | 3 | 0 | 3 |
| BPR 121 Blueprint Reading: Mach | 1 | 2 | 2 |
| | 5 | 8 | 8 |

| **SUMMER TERM** | | | |
|---|---|---|---|
| MAC 112A Machine Technology II | 1 | 6 | 3 |

| **SECOND YEAR** | | | |
|---|---|---|---|
| **FALL SEMESTER** | | | |
| MAC 112B Machine Technology II | 1 | 6 | 3 |
| MAC 122 CNC Turning | 1 | 3 | 2 |
| | 2 | 9 | 5 |

| **SPRING SEMESTER** | | | |
|---|---|---|---|
| MAC 113A Machine Technology III | 1 | 6 | 3 |
| WLD 122 Basic Welding Processes | 1 | 3 | 2 |
| MAC 124 CNC Milling | 1 | 3 | 2 |
| | 3 | 12 | 7 |

| **SUMMER TERM** | | | |
|---|---|---|---|
| MEC 110 Intro to CAD/CAM | 1 | 2 | 2 |
| MAC 113B Machine Technology III | 1 | 6 | 3 |
| | 2 | 8 | 5 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 36**

# DIPLOMA
## MECHANICAL DRAFTING TECHNOLOGY

The Mechanical Drafting Technology curriculum prepares technicians to produce drawings of mechanical parts, components of mechanical systems, and mechanisms. CAD and the importance of technically correct drawings and designs based on current standards are emphasized.

Course work includes mechanical drafting, CAD, and proper drawing documentation. Concepts such as machine shop processes, basic materials, and physical sciences as they relate to the design process are also included. The use of proper dimensioning and tolerance techniques is stressed.

Graduates should qualify for employment in mechanical areas such as manufacturing, fabrication, research and development, and service industries.

# DIPLOMA
## MECHANICAL DRAFTING TECHNOLOGY

### Course and Hour Requirements

| Major Courses | | Credit Hours | General Education Courses | | Credit Hours |
|---|---|---|---|---|---|
| DFT | 111 | 4 | **Communications:** | | |
| DFT | 112 | 4 | ENG | 101 | 3 |
| DFT | 151 | 3 | | | |
| DFT | 152 | 3 | | | |
| MEC | 110 | 2 | **Mathematics:** | | |
| CIS | 110 | 3 | MAT | 101 | 3 |
| DFT | 121 | 2 | | | |
| ISC | 221 | 3 | **Total General Education Hours: 6** | | |
| ISC | 255 | 3 | | | |
| MEC | 161 | 3 | | | |

**Total Major Hours: 30**

**TOTAL SEMESTER HOURS CREDIT: 36**

# DIPLOMA
## MECHANICAL DRAFTING TECHNOLOGY

### Suggested Sequence of Courses
### Day Sequence

|  | | | | HOURS | |
|---|---|---|---|---|---|
| **FALL SEMESTER** | | | **CLASS** | **LAB** | **CREDIT** |
| DFT | 111 | Technical Drafting I | 2 | 6 | 4 |
| DFT | 151 | CAD I | 2 | 3 | 3 |
| MAT | 101 | Applied Mathematics I | 2 | 2 | 3 |
| MEC | 161 | Manufacturing Processes I | 3 | 0 | 3 |
| ENG | 101 | Applied Communications I | 3 | 0 | 3 |
| | | | 12 | 11 | 16 |
| **SPRING SEMESTER** | | | | | |
| CIS | 110 | Intro to Computers | 2 | 2 | 3 |
| DFT | 152 | CAD II | 2 | 3 | 3 |
| ISC | 221 | Statistical Quality Control | 3 | 0 | 3 |
| ISC | 255 | Engineering Economy | 2 | 2 | 3 |
| | | | 8 | 7 | 12 |
| **SUMMER TERM** | | | | | |
| DFT | 112 | Technical Drafting II | 2 | 6 | 4 |
| DFT | 121 | Intro to GD & T | 1 | 2 | 2 |
| MEC | 110 | Introduction to CAD/CAM | 1 | 2 | 2 |
| | | | 4 | 10 | 8 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 36**

# DIPLOMA
## MECHANICAL DRAFTING TECHNOLOGY

### Suggested Sequence of Courses
### Night Sequence

| FIRST YEAR | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| **FALL SEMESTER** | | | | | |
| DFT | 111 | Technical Drafting I | 2 | 6 | 4 |
| MAT | 101 | Applied Mathematics I | 2 | 2 | 3 |
| ENG | 101 | Applied Communications I | 3 | 0 | 3 |
| | | | 7 | 8 | 10 |
| **SPRING SEMESTER** | | | | | |
| DFT | 151 | CAD I | 2 | 3 | 3 |
| CIS | 110 | Intro to Computers | 2 | 2 | 3 |
| | | | 4 | 5 | 6 |
| **SUMMER TERM** | | | | | |
| DFT | 152 | CAD II | 2 | 3 | 3 |
| MEC | 110 | Intro to CAD/CAM | 1 | 2 | 2 |
| | | | 3 | 5 | 5 |
| **SECOND YEAR** | | | | | |
| **FALL SEMESTER** | | | | | |
| DFT | 121 | Intro to GD & T | 1 | 2 | 2 |
| MEC | 161 | Manufacturing Processes I | 3 | 0 | 3 |
| | | | 4 | 2 | 5 |
| **SPRING SEMESTER** | | | | | |
| ISC | 221 | Statistical Quality Control | 3 | 0 | 3 |
| ISC | 225 | Engineering Economy | 2 | 2 | 3 |
| | | | 5 | 2 | 6 |
| **SUMMER TERM** | | | | | |
| DFT | .112 | Technical Drafting II | 2 | 6 | 4 |

The "HOURS" header spans CLASS, LAB, CREDIT.

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 36**

# DIPLOMA
# PLUMBING

The Plumbing curriculum is designed to give individuals the opportunity to acquire basic skills to assist with the installation and repairs of plumbing systems in residential and small buildings.

Course work includes sketching diagrams, interpretation of blueprints and practices in plumbing assembly. Students will gain knowledge of State Codes and requirements.

Graduates should qualify for employment at parts supply houses, maintenance companies, and plumbing contractors to assist with various plumbing applications.

# DIPLOMA
# PLUMBING

## Course and Hour Requirements

| Major Courses | | Credit Hours |
|---|---|---|
| BPR | 130 | 2 |
| PLU | 110 | 9 |
| PLU | 120 | 9 |
| PLU | 130 | 6 |
| PLU | 140 | 2 |
| PLU | 150 | 2 |
| WLD | 112 | 2 |

**Total Major Hours: 32**

| General Education Courses | | Credit Hours |
|---|---|---|
| **Communications:** | | |
| ENG | 101 | 3 |
| **Mathematics:** | | |
| MAT | 101 | 3 |

**Total General Education Hours: 6**

## TOTAL SEMESTER HOURS CREDIT: 38

# DIPLOMA
# PLUMBING

## Suggested Sequence of Courses
## Day Sequence

| FALL SEMESTER | | | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| PLU | 110 | Modern Plumbing | 4 | 15 | 9 |
| PLU | 150 | Plumbing Diagrams | 1 | 2 | 2 |
| BPR | 130 | Blueprint Reading/Construct | 1 | 2 | 2 |
| | | | 6 | 19 | 13 |
| **SPRING SEMESTER** | | | | | |
| PLU | 120 | Plumbing Applications | 4 | 15 | 9 |
| MAT | 101 | Applied Mathematics I | 2 | 2 | 3 |
| | | | 6 | 17 | 12 |
| **SUMMER TERM** | | | | | |
| PLU | 140 | Intro to Plumbing codes | 1 | 2 | 2 |
| PLU | 130 | Plumbing Systems | 3 | 9 | 6 |
| ENG | 101 | Applied Communications I | 3 | 0 | 3 |
| WLD | 112 | Basic Welding Processes | 1 | 3 | 2 |
| | | | 8 | 14 | 13 |

## TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 38

# DIPLOMA
# PLUMBING

## Suggested Sequence of Courses
## Night Sequence

| FIRST YEAR | | HOURS | | |
|---|---|---|---|---|
| **FALL SEMESTER** | | **CLASS** | **LAB** | **CREDIT** |
| PLU 110A | Modern Plumbing | 2 | 8 | 5 |
| PLU 150 | Plumbing Diagrams | 1 | 2 | 2 |
| | | 3 | 10 | 7 |
| **SPRING SEMESTER** | | | | |
| PLU 110B | Modern Plumbing | 2 | 7 | 4 |
| BPR 130 | Blueprint Reading/Construct | 1 | 2 | 2 |
| | | 3 | 9 | 6 |
| **SUMMER TERM** | | | | |
| PLU 120A | Plumbing Applications | 2 | 8 | 5 |
| MAT 101 | Applied Mathematics I | 2 | 2 | 3 |
| | | 4 | 10 | 8 |
| **SECOND YEAR** | | | | |
| **FALL SEMESTER** | | | | |
| PLU 120B | Plumbing Applications | 2 | 7 | 4 |
| **SPRING SEMESTER** | | | | |
| PLU 130A | Plumbing Systems | 2 | 6 | 4 |
| WLD 112 | Basic Welding Processes | 1 | 3 | 2 |
| | | 3 | 9 | 6 |
| **SUMMER TERM** | | | | |
| PLU 130B | Plumbing Systems | 1 | 3 | 2 |
| PLU 140 | Intro to Plumbing Codes | 1 | 2 | 2 |
| ENG 101 | Applied Communications I | 3 | 0 | 3 |
| | | 5 | 5 | 7 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 38**

# DIPLOMA
## PRACTICAL NURSING

The Practical Nursing curriculum prepares individuals with the knowledge and skills to provide nursing care to children and adults.

Students will participate in assessment, planning, implementing, and evaluating nursing care.

Graduates are eligible to apply to take the National Council Licensure Examination (NCLEX-PN) which is required for practice as a Licensed Practical Nurse. Employment opportunities include hospitals, rehabilitation/long term care/home health facilities, clinics, and physicians' offices.

# DIPLOMA
# PRACTICAL NURSING

## Course and Hour Requirements

| Major Courses | | Credit Hours |
|---|---|---|
| NUR | 101 | 11 |
| NUR | 102 | 12 |
| NUR | 103 | 10 |
| BIO | 163 | 5 |
| NUR | 191 | 1 |

**Total Major Hours: 39**

**General Education Courses**     **Credit Hours**

**Communications:**

| ENG | 111 | 3 |
|---|---|---|

**Social/Behavioral Sciences**

| PSY | 110 | 3 |
|---|---|---|

**Total General Education Hours: 6**

**OTHER REQUIRED COURSES**

| BIO | 155 | 3 |
|---|---|---|

**TOTAL SEMESTER HOURS CREDIT: 48**

# DIPLOMA
# PRACTICAL NURSING

## Suggested Sequence of Courses
## Day Sequence

| | | | HOURS PER WEEK | | | |
|---|---|---|---|---|---|---|
| **FALL SEMESTER** | | | **Class** | **Lab** | **Clinical** | **Credit** |
| NUR | 101 | Practical Nursing I | 7 | 6 | 6 | 11 |
| BIO | 163 | Basic Anatomy and Physiology | 4 | 2 | 0 | 5 |
| ENG | 111 | Expository Writing | 3 | 0 | 0 | 3 |
| | | | 14 | 8 | 6 | 19 |
| **SPRING SEMESTER** | | | | | | |
| NUR | 102 | Practical Nursing II | 8 | 0 | 12 | 12 |
| NUR | 191 | Selected Topics in Pharmacology | 0 | 3 | 0 | 1 |
| BIO | 155 | Nutrition | 3 | 0 | 0 | 3 |
| | | | 11 | 3 | 12 | 16 |
| **SUMMER TERM** | | | | | | |
| NUR | 103 | Practical Nursing III | 6 | 0 | 12 | 10 |
| PSY | 110 | Lifespan Development | 3 | 0 | 0 | 3 |
| | | | 9 | 0 | 12 | 13 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 48**

# DIPLOMA
## SURGICAL TECHNOLOGY (Proposed For Fall 1999)

The Surgical Technology curriculum prepares individuals to assist in the care of the surgical patient in the operating room and to function as a member of the surgical team.

Students will apply theoretical knowledge to the care of patients undergoing surgery and develop skills necessary to prepare supplies, equipment, and instruments; maintain aseptic conditions; prepare patients for surgery; and assist surgeons during operations.

Graduates of this program will be eligible to apply to take the Liason Council's Certification Examination for Surgical Technologists. Employment opportunities include labor/delivery/emergency departments, inpatient/outpatient surgery centers, dialysis units/facilities, physicians' offices, and central supply processing units.

# DIPLOMA
## SURGICAL TECHNOLOGY (Proposed For Fall 1999)

### Course and Hour Requirements

| Major Courses | | Credit Hours |
|---|---|---|
| SUR | 110 | 2 |
| SUR | 111 | 7 |
| SUR | 122 | 6 |
| SUR | 123 | 7 |
| SUR | 134 | 6 |
| SUR | 135 | 4 |
| SUR | 137 | 1 |

**Total Major Hours: 33**

**Choose seven hours from the following:**

| | | |
|---|---|---|
| ACA | 115 | 1 |
| BIO | 163 | 5 |
| BIO | 175 | 3 |
| CIS | 110 | 3 |
| PSY | 118 | 3 |
| PSY | 150 | 3 |
| SUR | 210 | 2 |
| SUR | 211 | 2 |

**General Education Courses** — **Credit Hours**

**Communications:**

| | | |
|---|---|---|
| ENG | 111 | 3 |

**Mathematics: Select one**

| | | |
|---|---|---|
| MAT | 101 | 3 |
| MAT | 140 | 3 |
| MAT | 161 | 3 |

**Total General Education Hours: 6**

**Other Required Hours:**

| | | |
|---|---|---|
| HSC | 110 | 1 |
| HSC | 120 | 1 |

**Total Other Required Hours: 2**

### TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 48

# DIPLOMA
## SURGICAL TECHNOLOGY (Proposed For Fall 1999)

### Course and Hour Requirements

| Title | Class | Lab | Clin | Exp | Credit |
|---|---|---|---|---|---|
| **I. General Education** | | | | | |
| **Required** | | | | | |
| ENG 111 Expository Writing | 3 | 0 | 0 | 0 | 3 |
| **Select one of the following:** | | | | | |
| MAT 101 Applied Mathematics I | 2 | 2 | 0 | 0 | 3 |
| MAT 140 Survey of Mathematics | 3 | 0 | 0 | 0 | 3 |
| MAT 161 College Algebra I | 3 | 0 | 0 | 0 | 3 |
| | 5-6 | 0-2 | 0 | 0 | 6 |
| **II. Major Courses** | | | | | |
| **Required** | | | | | |
| SUR 110 Intro to Surgical Tech | 2 | 0 | 0 | 0 | 2 |
| SUR 111 Perioperative Patient Care | 5 | 6 | 0 | 0 | 7 |
| SUR 122 Surgical Procedures I | 5 | 3 | 0 | 0 | 6 |
| SUR 123 SUR Clinical Practice I | 0 | 0 | 21 | 0 | 7 |
| SUR 134 Surgical Procedures II | 5 | 3 | 0 | 0 | 6 |
| SUR 135 SUR Clinical Practice II | 0 | 0 | 12 | 0 | 4 |
| SUR 137 Prof Success Preparation | 1 | 0 | 0 | 0 | 1 |
| | 18 | 12 | 33 | 0 | 33 |
| **III. Other Major Hours** | | | | | |
| **Select seven hours from the following:** | | | | | |
| BIO 163 Basic Anatomy and Physiology | 4 | 2 | 0 | 0 | 5 |
| BIO 175 General Microbiology | 2 | 2 | 0 | 0 | 3 |
| CIS 110 Intro to Computers | 2 | 2 | 0 | 0 | 3 |
| PSY 118 Interpersonal Psychology | 3 | 0 | 0 | 0 | 3 |
| PSY 150 General Psychology | 3 | 0 | 0 | 0 | 3 |
| ACA 115 Success and Study Skills | 0 | 2 | 0 | 0 | 1 |
| SUR 210 Advanced SUR Clinical Practice | 0 | 0 | 6 | 0 | 2 |
| SUR 211 Advanced Theoretical Concepts | 2 | 0 | 0 | 0 | 2 |
| | 16 | 8 | 6 | 0 | 22 |
| **IV. Other Required Hours** | | | | | |
| HSC 110 Orientation to Health Careers | 0 | 2 | 0 | 0 | 1 |
| HSC 120 CPR | 1 | 0 | 0 | 0 | 1 |
| | 1 | 2 | 0 | 0 | 2 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 48**

# DIPLOMA
## WELDING TECHNOLOGY

The Welding Technology curriculum provides students with a sound understanding of the science, technology, and applications essential for successful employment in the welding and metal industry.

Instruction includes consumable and non-consumable electrode welding and cutting processes. Courses in math, blueprint reading, metallurgy, welding inspection, and destructive and non-destructive testing provides the student with industry-standard skills developed through classroom training and practical application.

Successful graduates of the Welding Technology curriculum may be employed as entry level technicians in welding and metalworking industries. Career opportunities also exist in construction, manufacturing, fabrication, sales, quality control, supervision, and welding-related self-employment.

# DIPLOMA
## WELDING TECHNOLOGY

### Course and Hour Requirements

| Major Courses | | Credit Hours | General Education | | |
|---|---|---|---|---|---|
| WLD | 110 | 2 | **Courses** | | **Credit Hours** |
| WLD | 115 | 5 | **Communications:** | | |
| WLD | 121 | 4 | ENG | 101 | 3 |
| WLD | 131 | 4 | | | |
| WLD | 141 | 3 | **Mathematics:** | | |
| WLD | 132 | 3 | MAT | 101 | 3 |
| WLD | 122 | 3 | | | |
| WLD | 215 | 4 | **Total General Education Hours: 6** | | |
| BPR | 111 | 2 | | | |
| | | | **OTHER REQUIRED COURSES** | | |
| **Choose one:** | | | BPR | 121 | 2 |
| DFT | 119 | 2 | | | |
| WLD | 111 | 2 | **Total Other Required Hours: 2** | | |

**Total Major Hours: 32**

**TOTAL SEMESTER HOURS CREDIT: 40**

# DIPLOMA
# WELDING TECHNOLOGY

## Suggested Sequence of Courses
## Day Sequence

|  |  |  | CLASS | LAB | CREDIT |
|---|---|---|---|---|---|
| **FALL SEMESTER** |  |  |  |  |  |
| WLD | 110 | Cutting Processes | 1 | 3 | 2 |
| WLD | 121 | GMAW (MIG) FCA W/Plate | 2 | 6 | 4 |
| WLD | 115 | SMAW (Stick) Plate | 2 | 9 | 5 |
| MAT | 101 | Applied Mathematics I | 2 | 2 | 3 |
| BPR | 111 | Blueprint Reading | 1 | 2 | 2 |
|  |  |  | 8 | 22 | 16 |
| **SPRING SEMESTER** |  |  |  |  |  |
| WLD | 215 | SMAW (Stick) Pipe | 1 | 9 | 4 |
| WLD | 122 | GMAW (MIG) Plate/Pipe | 1 | 6 | 3 |
| WLD | 131A | GTAW (TIG) Plate | 1 | 3 | 2 |
| ENG | 101 | Applied Communications I | 3 | 0 | 3 |
| DFT | 119 | Basic CAD | 1 | 2 | 2 |
| or |  |  |  |  |  |
| WLD | 111 | Oxy-Fuel Welding | 1 | 3 | 2 |
|  |  |  | 7 | 20-21 | 14 |
| **SUMMER TERM** |  |  |  |  |  |
| WLD | 131B | GTAW (TIG) Plate | 1 | 3 | 2 |
| WLD | 132 | GTAW (TIG) Plate/Pipe | 1 | 6 | 3 |
| WLD | 141 | Symbols & Specifications | 2 | 2 | 3 |
| BPR | 121 | Blueprint Reading: Mech | 1 | 2 | 2 |
|  |  |  | 5 | 13 | 10 |

**HOURS** (spanning CLASS, LAB, CREDIT)

## TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 40

# DIPLOMA
# WELDING TECHNOLOGY

## Suggested Sequence of Courses
## Night Sequence

| FIRST YEAR | | | HOURS | | |
|---|---|---|---|---|---|
| **FALL SEMESTER** | | | **CLASS** | **LAB** | **CREDIT** |
| WLD | 110 | Cutting Processes | 1 | 3 | 2 |
| WLD | 121 | GMAW (MIG) FCA w/Plate | 2 | 6 | 4 |
| | | | 3 | 9 | 6 |
| **SPRING SEMESTER** | | | | | |
| WLD | 215 | SMAW (Stick) Pipe | 1 | 9 | 4 |
| ENG | 101 | Applied Communications I | 3 | 0 | 3 |
| DFT | 119 | Basic CAD | 1 | 2 | 2 |
| or | | | | | |
| WLD | 111 | Oxy-Fuel Welding | 1 | 3 | 2 |
| | | | 5 | 11-12 | 9 |
| **SUMMER TERM** | | | | | |
| WLD | 131B | GTAW (TIG) Plate | 1 | 3 | 2 |
| WLD | 132 | GTAW (TIG) Plate/Pipe | 1 | 6 | 3 |
| | | | 2 | 9 | 5 |
| **SECOND YEAR** | | | | | |
| **FALL SEMESTER** | | | | | |
| WLD | 115 | SMAW (Stick) Plate | 2 | 9 | 5 |
| MAT | 101 | Applied Mathematics I | 2 | 2 | 3 |
| BPR | 111 | Blueprint Reading | 1 | 2 | 2 |
| | | | 5 | 13 | 10 |
| **SPRING SEMESTER** | | | | | |
| WLD | 122 | GMAW (MIG) Plate/Pipe | 1 | 6 | 3 |
| WLD | 131A | GTAW (TIG) Plate | 1 | 3 | 2 |
| | | | 2 | 9 | 5 |
| **SUMMER TERM** | | | | | |
| WLD | 141 | Symbols & Specifications | 2 | 2 | 3 |
| BPR | 121 | Blueprint Reading: Mech | 1 | 2 | 2 |
| | | | 3 | 4 | 5 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 40**

# *CURRICULUM CERTIFICATE PROGRAMS*

## CERTIFICATE
## ADVANCED LEADERSHIP

Advanced Leadership is a certificate option in the Industrial Management Technology curriculum. The courses included in this certificate will enhance the skills of current supervisors with modern management and leadership training.

All certificate courses are creditable toward the diploma or Associate degree that the college is approved to offer.

## CERTIFICATE
## ADVANCED LEADERSHIP

### Course and Hour Requirements

**Required Courses**     **Credit Hours**

**Choose 12 hours from the following:**

| | | | |
|---|---|---|---|
| ISC | 128 | Industrial Leadership | 2 |
| ISC | 132 | Manufacturing Quality Control | 3 |
| ISC | 221 | Statistical Quality Control | 3 |
| ISC | 233 | Industrial Organization & Management | 3 |
| ISC | 235 | Management Problems | 3 |
| OMT | 150 | Operation Management Behavioral Sciences | 3 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 12**

# CERTIFICATE
# AIR CONDITIONING, HEATING, and REFRIGERATION

This certificate offers students recognition for partial completion of the Air Conditioning, Heating and Refrigeration Technical program plus a refrigerant certificate course. This offers excellent inservice training options for employers.

All certificate courses are creditable toward the diploma or Associate degree that the college is approved to offer.

# CERTIFICATE
# AIR CONDITIONING, HEATING, and REFRIGERATION

## Course and Hour Requirements

| Required Courses | | | Credit Hours |
|---|---|---|---|
| AHR | 110 | Intro to Refrigeration | 5 |
| AHR | 112 | Heating Technology | 4 |
| AHR | 114 | Heat Pump Technology | 4 |
| AHR | 111 | HVACR Electricity | 3 |
| AHR | 160 | Refrigerant Certification | 1 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 17**

## CERTIFICATE
## AUTOBODY

The Autobody certificate offers a broad range of basic courses which rewards students for partial completion of the Autobody program and also serves as an excellent vehicle for inservice training.

All certificate courses are creditable toward the diploma or Associate degree that the college is approved to offer.

## CERTIFICATE
## AUTOBODY

### Course and Hour Requirements

| Required Courses | | | Credit Hours |
|---|---|---|---|
| AUB | 111 | Painting and Refinishing I | 4 |
| AUB | 121 | Non-Structural Damage I | 3 |
| AUB | 131 | Structural Damage I | 4 |
| AUB | 134 | Autobody MIG Welding | 3 |
| AUB | 122 | Non-Structural Damage II | 4 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 18**

## CERTIFICATE
## BASIC ELECTRONICS

Basic Electronics is a certificate option in the Electronic Engineering Technology program and provides the ability to acquire an introductory knowledge of electronic principles, applications, component testing and selection, and the use of basic test equipment. This option is for those who do not necessarily need a background in digital electronics or are already proficient in that area.

All certificate courses are creditable toward the diploma or Associate degree that the college is approved to offer.

## CERTIFICATE
## BASIC ELECTRONICS

### Course and Hour Requirements

| Required Courses | | | Credit Hours |
|---|---|---|---|
| ELC | 131 | DC/AC Circuit Analysis | 5 |
| ELN | 131 | Electronic Devices | 4 |
| ELN | 135 | Electronic Circuits | 3 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 12**

## CERTIFICATE
## BASIC LAW ENFORCEMENT TRAINING

Basic Law Enforcement Training (BLET) is designed to give students essential skills required for entry-level employment as law enforcement officers with state, county, or municipal governments, or with private enterprise.

This program utilizes State-commission-mandated topics and methods of instruction. General subjects include, but are not limited to, criminal, juvenile, civil, traffic, and alcoholic beverage laws; investigative, patrol, custody, and court procedures; emergency responses; and ethics and community relations.

Successful graduates receive a curriculum certificate and are qualified to take certification examinations mandated by the North Carolina Criminal Justice Education and Training Standards Commission and/or the North Carolina Sheriffs' Education and Training Standards Commission.

## CERTIFICATE
## BASIC LAW ENFORCEMENT TRAINING

### Course and Hour Requirements

| Required Courses | | | Credit Hours |
|---|---|---|---|
| CJC | 100 | Basic Law Enforcement Training | 18 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 18**

## CERTIFICATE
## BROADCASTING AND PRODUCTION

The Broadcasting and Production certificate gives students basic introductory courses for the Broadcast industry. This certificate is a fast track to equipment use and technical theory.

All certificate courses are creditable toward the diploma or Associate degree that the college is approved to offer.

## CERTIFICATE
## BROADCASTING AND PRODUCTION

### Course and Hour Requirements

| Required Courses | | | Credit Hours |
|---|---|---|---|
| BPT | 112 | Broadcast Writing | 4 |
| BPT | 231 | Video/TV Production I | 4 |
| BPT | 232 | Video/TV Production II | 4 |
| BPT | 235 | TV Production I | 2 |
| BPT | 255 | Computer-Based Production | 3 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 17**

## CERTIFICATE
## BUSINESS PRESENTATION

The Business Presentation certificate is designed for individuals desiring skills in the design, creation, and production of presentations in the business environment. Proper use of various software, font type, data acquisition, and presentation mediums will be the focus of this study.

Technology changes at a rapid pace. For this reason, all students who wish to earn the Business Presentation certificate must apply for and be accepted into the current certificate program. Upon acceptance, any previously earned, comparable college-level computer course work will be evaluated for transfer credit. Evaluation will compare previous course content to current technology requirements. Therefore, credit will not automatically be extended course for course.

## CERTIFICATE
## BUSINESS PRESENTATION

### Course and Hour Requirements

| Required Courses | | | Credit Hours |
|---|---|---|---|
| CIS | 110 | Introduction to Computers | 3 |
| CIS | 120 | Intro to Prog & Logic | 3 |
| CIS | 130 | Survey of Operating Sys | 3 |
| CIS | 169 | Business Presentations | 2 |
| CIS | 172 | Intro to the Internet | 3 |
| CIS | 164 | DTP Layout and Design | 3 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 17**

# CERTIFICATE
# CARPENTRY

The Carpentry program trains students to construct and make repairs to residential structures using standard building materials and hand and power tools. This program is designed to teach carpentry skills and a general knowledge of residential construction. Instruction also includes the study of mathematics, blueprint reading, building codes and energy efficient construction.

All certificate courses are creditable toward the diploma or Associate degree that the college is approved to offer.

# CERTIFICATE
# CARPENTRY

## Course and Hour Requirements

| Required Courses | | | Credit Hours |
|---|---|---|---|
| CAR | 111A | Carpentry I | 4 |
| CAR | 112A | Carpentry II | 4 |
| CAR | 113A | Carpentry III | 4 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 12**

## CERTIFICATE
## CRIME SCENE INVESTIGATOR

This certificate program will allow arson investigators and police officers the opportunity to increase their knowledge and skills in the gathering of evidence and testimony.

All certificate courses are creditable toward the AAS degree that the College is approved to offer.

## CERTIFICATE
## CRIME SCENE INVESTIGATOR

### Course and Hour Requirements

| Required Courses | | | Credit Hours |
|---|---|---|---|
| CJC | 132 | Court Procedure & Evidence | 3 |
| CJC | 221 | Investigative Principles | 4 |
| CJC | 222 | Criminalistics | 3 |
| CJC | 114 | Investigative Photography | 2 |
| CJC | 120 | Interviews/Interrogation | 2 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 14**

# CERTIFICATE
# DATABASE MANAGEMENT

The Database Management certificate is designed for individuals desiring skills in using the computer to control, manage, and maximize information available through database application. Data acquisition, data manipulation, and reporting will be inclusive in this course of study.

Technology changes at a rapid pace. For this reason, all students who wish to earn the Database Management certificate must apply for and be accepted into the current certificate program. Upon acceptance, any previously earned, comparable college-level computer course work will be evaluated for transfer credit. Evaluation will compare previous course content to current technology requirements. Therefore, credit will not automatically be extended course for course.

# CERTIFICATE
# DATABASE MANAGEMENT

## Course and Hour Requirements

| Required Courses | | | Credit Hours |
|---|---|---|---|
| CIS | 110 | Introduction to Computers | 3 |
| CIS | 115 | Intro to Prog & Logic | 3 |
| CIS | 130 | Survey of Operating Sys | 3 |
| CIS | 152 | Database Concepts & Apps | 3 |
| CIS | 153 | Database Applications | 3 |
| CIS | 172 | Intro to the Internet | 3 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 18**

# CERTIFICATE
# DIGITAL ELECTRONICS

Digital Electronics is a certificate option in the Electronic Engineering Technology program which focuses primarily on digital electronics and electronic circuits related to computerized devices and controls. The certificate option is suited for the student whose primary interest is in digital electronics or the student who has basic electronic experience and needs to upgrade in the digital and computer area.

All certificate courses are creditable toward the diploma or Associate degree that the college is approved to offer.

# CERTIFICATE
# DIGITAL ELECTRONICS

## Course and Hour Requirements

| Required Courses | | | Credit Hours |
|---|---|---|---|
| ELN | 133 | Digital Electronics | 4 |
| ELN | 232 | Introduction to Microprocessors | 4 |
| ELN | 233 | Microprocessor Systems | 4 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 12**

## CERTIFICATE
## EARLY CHILDHOOD ASSOCIATE

Cleveland Community College's Early Childhood Certificate program prepares graduates for positions in child care settings. Successful completers of all courses in the program will receive the College's Early Childhood Certificate and State Certificates in three areas: the North Carolina Early Childhood Credential; the North Carolina Family Credential; and the North Carolina Early Childhood Administration Certificate. However, students may select one or more North Carolina certificates without College certification. The College recommends completion of all courses for the College certificate and the three licensure areas.

All courses taken for the certificate or licensure may be transferred into the two-year Associate of Applied Science degree.

## CERTIFICATE
## EARLY CHILDHOOD ASSOCIATE

### Course and Hour Requirements

| Required Courses | | | Credit Hours |
|---|---|---|---|
| EDU | 111 | Early Childhood Credential I | 2 |
| EDU | 112 | Early Childhood Credential II | 2 |
| or | | | |
| EDU | 113 | Family Childhood Credential | 2 |
| EDU | 261 | Early Childhood Administration I | 2 |
| EDU | 262 | Early Childhood Administration II | 3 |
| EDU Courses | | (Level I Portfolio) | 6 |
| PSY or SOC Courses | | | 3 |
| | | | 18 |

**TOTAL CREDIT HOURS REQUIRED FOR COLLEGE CERTIFICATE: 18**

**State licensure is as follows:**

**North Carolina Early Childhood Credential**

| EDU | 111 | Early Childhood Credential I | 2 |
|---|---|---|---|
| EDU | 112 | Early Childhood Credential II | 2 |
| | | | 4 |

**North Carolina Family Credential**

| EDU | 111 | Early Childhood Credential I | 2 |
|---|---|---|---|
| EDU | 113 | Family Childhood Credential | 2 |
| | | | 4 |

**North Carolina Early Childhood Administration Certificate**

| EDU | 261 | Early Childhood Administration I | 2 |
|---|---|---|---|
| EDU | 262 | Early Childhood Administration II | 3 |
| EDU Courses (Level I Portfolio) | | | 7 |
| | | | 12 |

## CERTIFICATE
## ELECTRICAL

The Electrical Certificate offers a direct path to basic courses in theory, residential wiring, motor controls and programmable logic controls.

All certificate courses are creditable toward the diploma or Associate degree that the college is approved to offer.

## CERTIFICATE
## ELECTRICAL

### Course and Hour Requirements

| Required Courses | | | Credit Hours |
|---|---|---|---|
| ELC | 112 | DC/AC Electricity | 5 |
| ELC | 113 | Basic Wiring I | 4 |
| ELC | 114 | Basic Wiring II | 4 |
| ELC | 117 | Motors & Controls | 4 |
| ELC | 128 | Intro to PLC | 3 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 18**

## CERTIFICATE
## INDUSTRIAL FIRE SAFETY SPECIALIST

This certificate program will provide industrial and municipal fire-fighters and brigade members the technical information to inspect plant facilities and make recommendations. Plant Emergency Organization operations and other safe guards will be covered.

All certificate courses are creditable toward the AAS degree that the College is approved to offer.

## CERTIFICATE
## INDUSTRIAL FIRE SAFETY SPECIALIST

### Course and Hour Requirements

| Required Courses | | | Credit Hours |
|---|---|---|---|
| FIP | 120 | Introduction to Fire Protection Hazards | 2 |
| FIP | 124 | Fire Prevention and Public Education | 3 |
| FIP | 136 | Inspection & Codes | 3 |
| FIP | 140 | Industrial Fire Protection | 2 |
| FIP | 144 | Sprinklers and Auto Alarms | 3 |
| FIP | 164 | OSHA Standards | 2 |
| COE | 122 | Co-Op Work Experience II | 2 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 17**

# CERTIFICATE
# INTERNET ADMINISTRATION*

The Internet Administration certificate is designed for individuals desiring skills in the administration of the Internet. This course of study will provide individuals with both network administration and Internet administration skills.

Technology changes at a rapid pace. For this reason, all students who wish to earn the Internet Administration certificate must apply for and be accepted into the current certificate program. Upon acceptance, any previously earned, comparable college-level computer course work will be evaluated for transfer credit. Evaluation will compare previous course content to current technology requirements. Therefore, credit will not automatically be extended course for course.

# CERTIFICATE
# INTERNET ADMINISTRATION*

## Course and Hour Requirements

| Required Courses | | | Credit Hours |
|---|---|---|---|
| NET | 250 | Advanced Networks I | 3 |
| NET | 251 | Advanced Networks II | 3 |
| NET | 260 | Internet Dev & Support | 3 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 9**

**\* Completion of the Network Administration Certificate is required before a student is eligible to work toward the Internet Administration Certificate.**

# CERTIFICATE
# MECHANICAL DRAFTING

The Mechanical Drafting certificate offers students with limited time the basics of mechanical drafting and computer aided design.

All certificate courses are creditable toward the diploma or Associate degree that the college is approved to offer.

# CERTIFICATE
# MECHANICAL DRAFTING

## Course and Hour Requirements

| Required Courses | | | Credit Hours |
|---|---|---|---|
| DFT | 111 | Technical Drafting I | 4 |
| DFT | 112 | Technical Drafting II | 4 |
| DFT | 151 | CAD I | 3 |
| DFT | 152 | CAD II | 3 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 14**

## CERTIFICATE
## NETWORK ADMINISTRATION

The Network Administration certificate is designed for individuals desiring local area network administration skills. Basic network concepts, administration of networks, and fundamental network applications will be studied in the pursuit of this course of study.

Technology changes at a rapid pace. For this reason, all students who wish to earn the Network Administration certificate must apply for and be accepted into the current certificate program. Upon acceptance, any previously earned, comparable college-level computer course work will be evaluated for transfer credit. Evaluation will compare previous course content to current technology requirements. Therefore, credit will not automatically be extended course for course.

## CERTIFICATE
## NETWORK ADMINISTRATION

### Course and Hour Requirements

| Required Courses | | | Credit Hours |
|---|---|---|---|
| CIS | 110 | Introduction to Computers | 3 |
| CIS | 130 | Survey of Operating Sys | 3 |
| NET | 110 | Data Comm/Networking | 3 |
| NET | 120 | Network Install/Admin I | 3 |
| NET | 220 | Network Install/Admin II | 3 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 15**

## CERTIFICATE
## PHLEBOTOMY

The Phlebotomy curriculum prepares individuals to obtain blood and other specimens for the purpose of laboratory analysis.

Course work includes proper specimen collection and handling, communications skills, and maintaining patient data.

Graduates may qualify for employment in hospitals, clinics, physicians' offices, and other health care settings and may be eligible for national certification as phlebotomy technicians.

## CERTIFICATE
## PHLEBOTOMY CERTIFICATE

### Course and Hour Requirements

| Required Courses | | | Credit Hours |
|---|---|---|---|
| PBT | 100 | Phlebotomy Technology | 6 |
| PBT | 101 | Phlebotomy Practicum | 3 |
| PSY | 101 | Applied Psychology | 3 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 12**

# CERTIFICATE
# PLUMBING

The Plumbing certificate program is designed to offer a faster track for preparing for residential plumbing skills. This is accomplished by focusing on residential venting, drains, water systems and fixture installation. Code requirements are included as a part of this study. This certificate will prepare a student for residential rough-in and finish work.

All certificate courses are creditable toward the diploma or Associate degree that the college is approved to offer.

# CERTIFICATE
# PLUMBING

## Course and Hour Requirements

| Required Courses | | | Credit Hours |
|---|---|---|---|
| PLU | 110A | Modern Plumbing | 5 |
| PLU | 120A | Plumbing Applications | 5 |
| PLU | 140 | Intro to Plumbing codes | 2 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 12**

## CERTIFICATE
## REAL ESTATE

The Real Estate curriculum provides the prelicensing education required by the North Carolina Real Estate Commission, prepares individuals to enter the profession, and offers additional education to meet professional development needs.

Course work includes the practices and principles of real estate, emphasizing financial and legal applications, property development, and property values.

Graduates should qualify for North Carolina Real Estate Sales and Broker examinations. They should be able to enter apprenticeship training and to provide real estate services to consumers in a competent manner.

The following prerequisite has been added to RLS 162 (Fundamentals of Real Estate): Satisfactory college placement test scores in reading and mathematics; or a grade of "S" in RED 090 (Improved Reading- 3-2-4), and a grade of "C" or higher in MAT 060 (Essential Mathematics- 3-2-4); or permission of the Dean of Business Technologies.

## CERTIFICATE
## REAL ESTATE

### Course and Hour Requirements

| Required Courses | | | Credit Hours |
|---|---|---|---|
| RLS | 112 | Real Estate Fundamentals | 4 |
| RLS | 113 | Real Estate Mathematics | 2 |
| RLS | 114 | Real Estate Brokerage | 2 |
| RLS | 115 | Real Estate Finance | 2 |
| RLS | 116 | Real Estate Law | 2 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 12**

# CERTIFICATE
# SPREADSHEET MANAGEMENT

The Spreadsheet management certificate is designed for individuals seeking knowledge in the management of data through the use of spreadsheets. Skills acquired will be an advanced knowledge of spreadsheet software including financial data management, numeric analysis and Internet access.

Technology changes at a rapid pace. For this reason, all students who wish to earn the Spreadsheet Management certificate must apply for and be accepted into the current certificate program. Upon acceptance, any previously earned, comparable college-level computer course work will be evaluated for transfer credit. Evaluation will compare previous course content to current technology requirements. Therefore, credit will not automatically be extended course for course.

# CERTIFICATE
# SPREADSHEET MANAGEMENT

## Course and Hour Requirements

| Required Courses | | | Credit Hours |
|---|---|---|---|
| ACC | 120 | Prin of Accounting I | 4 |
| CIS | 110 | Introduction to Computers | 3 |
| CIS | 120 | Spreadsheet I | 3 |
| CIS | 130 | Survey of Operating Sys | 3 |
| CIS | 172 | Intro to the Internet | 3 |
| CIS | 220 | Spreadsheets II | 2 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 18**

# CERTIFICATE
# TECHNICAL SUPPORT

The Technical Support certificate is designed for individuals desiring knowledge and skills in configuring, installing and trouble-shooting microcomputer systems (PC), including hardware components, data communications devices, software installation, and Internet access.

Technology changes at a rapid pace. For this reason, all students who wish to earn the Technical Support certificate must apply for and be accepted into the current certificate program. Upon acceptance, any previously earned, comparable college-level computer course work will be evaluated for transfer credit. Evaluation will compare previous course content to current technology requirements. Therefore, credit will not automatically be extended course for course.

# CERTIFICATE
# TECHNICAL SUPPORT

## Course and Hour Requirements

| Required Courses | | | Credit Hours |
|---|---|---|---|
| CIS | 110 | Introduction to Computers | 3 |
| CIS | 130 | Survey of Operating Sys | 3 |
| CIS | 172 | Intro to the Internet | 3 |
| CIS | 215 | Hardware Install/Maint | 3 |
| CIS | 216 | Software Install/Maint | 2 |
| NET | 110 | Data Comm/Networking | 3 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 17**

# CERTIFICATE
# WELDING

The Welding Certificate recognizes achievement in cutting, plate and pipe welding for stick, tig and mig processes.

All certificate courses are creditable toward the diploma or Associate degree that the college is approved to offer.

# CERTIFICATE
# WELDING

## Course and Hour Requirements

| Required Courses | | | Credit Hours |
|---|---|---|---|
| WLD | 110 | Cutting Processes | 2 |
| WLD | 115B | SMAW (Stick) Plate | 3 |
| WLD | 121 | GMAW (Mig) FCAW/Plate | 4 |
| WLD | 215 | SMAW (Stick) Pipe | 4 |
| WLD | 131A | GTAW (Tig) Plate | 2 |
| WLD | 132 | GTAW (Tig) Plate/Pipe | 3 |

**TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 18**

# *COURSE DESCRIPTIONS*

## ACADEMIC RELATED

Class
Lab or Shop
Credit Hours

### ACA 115–Success & Study Skills    0 2 1
This course provides an orientation to the campus resources and academic skills necessary to achieve educational objectives. Emphasis is placed on an exploration of facilities and services, study skills, library skills, self-assessment, wellness, goal-setting, and critical thinking. Upon completion, students should be able to manage their learning experiences to successfully meet educational goals. Basic computer skills will be introduced to students unfamiliar with computers.

## ACCOUNTING

### ACC 120–Prin Of Accounting I    3 2 4
This course introduces the basic principles and procedures of accounting. Emphasis is placed on collecting, summarizing, analyzing, and reporting financial information. Upon completion, students should be able to analyze data and prepare journal entries and reports as they relate to the accounting cycle.

### ACC 121–Prin of Accounting II    3 2 4
This course is a continuation of ACC 120. Emphasis is placed on corporate and managerial accounting for both external and internal reporting and decision making. Upon completion, students should be able to analyze and record corporate transactions, prepare financial statements and reports, and interpret them for management. Prerequisites: ACC 120

### ACC 129–Individual Income Taxes    2 2 3
This course introduces the relevant laws governing individual income taxation. Emphasis is placed on filing status, exemptions for dependents, gross income, adjustments, deductions, and computation of tax. Upon completion, students should be able to complete various tax forms pertaining to the topics covered in the course.

### ACC 149–Intro to Acc Spreadsheets    1 2 2
This course provides a working knowledge of computer spreadsheets and their use in accounting. Topics include pre-programmed problems, model-building problems, beginning-level macros, graphics, and what-if analysis enhancements of template problems. Upon completion, students should be able to use a computer spreadsheet to complete many of the tasks required in accounting. Prerequisites: ACC 120

### ACC 150–Computerized Gen Ledger    1 2 2
This course introduces microcomputer applications related to the major accounting systems. Topics include general ledger, accounts receivable, accounts payable, inventory, payroll, and correcting, adjusting, and closing entries. Upon completion, students should be able to use a computer accounting package to solve accounting problems. Prerequisites: ACC 120

### ACC 220–Intermediate Accounting I    3 2 4
This course is a continuation of the study of accounting principles with in-depth coverage of theoretical concepts and financial statements. Topics include generally accepted accounting principles and statements and extensive analyses of balance sheet components. Upon completion, students should be able to demonstrate competence in the conceptual framework underlying financial accounting, including the application of financial standards. Prerequisites: ACC 121

### ACC 221–Intermediate Acct II    3 2 4
This course is a continuation of ACC 220. Emphasis is placed on special problems which may include leases, bonds, investments, ratio analyses, present value applications, accounting changes, and corrections. Upon completion, students should be able to demonstrate an understanding of the principles involved and display an analytical problem-solving ability for the topics covered. Prerequisites: ACC 220

### ACC 225–Cost Accounting    3 0 3
This course introduces the nature and purposes of cost accounting as an information system for planning and control. Topics include direct materials, direct labor, factory overhead, process, job order, and standard cost systems. Upon completion, students should be able to demonstrate an understanding of the principles involved and display an analytical problem-solving ability for the topics covered. Prerequisites: ACC 121

### ACC 269–Auditing    3 0 3
This course covers the overall framework of the process of conducting audits and investigations. Emphasis is placed on collecting data from working papers, arranging and systematizing the audit, and writing the audit report. Upon completion, students should be able to demonstrate competence in applying the generally accepted auditing standards and the procedures for conducting an audit. Prerequisites: ACC 220

## AIR CONDITIONING, HEATING, AND REFRIGERATION

### AHR 110–Intro to Refrigeration    2 6 5
This course introduces the basic refrigeration process used in mechanical refrigeration and air conditioning systems. Topics include terminology, safety, and identification and function of components; refrigeration cycle; and tools and instrumentation used in mechanical refrigeration systems. Upon completion, students should be able to identify refrigeration systems and components, explain the refrigeration process, and use the tools and instrumentation of the trade.

**AHR 111–HVACR Electricity          2 2 3**
This course introduces electricity as it applies to HVACR equipment. Emphasis is placed on power sources, interaction of electrical components, wiring of simple circuits, and the use of electrical test equipment. Upon completion, students should be able to demonstrate good wiring practices and the ability to read simple wiring diagrams.

**AHR 112–Heating Technology          2 4 4**
This course covers the fundamentals of heating including oil, gas, and electric heating systems. Topics include safety, tools and instrumentation, system operating characteristics, installation techniques, efficiency testing, electrical power, and control systems. Upon completion, students should be able to explain the basic oil, gas, and electrical heating systems and describe the major components of a heating system.

**AHR 113–Comfort Cooling          2 4 4**
This course covers the installation procedures, system operations, and maintenance of residential and light commercial comfort cooling systems. Topics include terminology, component operation, and testing and repair of equipment used to control and produce assured comfort levels. Upon completion, students should be able to use psychometrics, manufacturer specifications, and test instruments to determine proper system operation.

**AHR 114–Heat Pump Technology          2 4 4**
This course covers the principles of air source and water source heat pumps. Emphasis is placed on safety, modes of operation, defrost systems, refrigerant charging, and system performance. Upon completion, students should be able to understand and analyze system performance and perform routine service procedures. Prerequisites: AHR 110 or AHR 113

**AHR 115–Refrigeration Systems          1 3 2**
This course introduces refrigeration systems and applications. Topics include defrost methods, safety and operational control, refrigerant piping, refrigerant recovery and charging, and leak testing. Upon completion, students should be able to assist in installing and testing refrigeration systems and perform simple repairs. Prerequisites: AHR 110

**AHR 130–HVAC Controls          2 2 3**
This course covers the types of controls found in residential and commercial comfort systems. Topics include electrical and electronic controls, control schematics and diagrams, test instruments, and analysis and troubleshooting of electrical systems. Upon completion, students should be able to diagnose and repair common residential and commercial comfort system controls. Prerequisites: AHR 111 or ELC 111

**AHR 133–HVAC Servicing          2 6 4**
The course covers the maintenance and servicing of HVAC equipment. Topics include testing, adjusting, maintaining, and troubleshooting HVAC equipment and record keeping. Upon completion, students should be able to adjust, maintain, and service HVAC equipment. Corequisites: AHR 112 or AHR 113

**AHR 151–HVAC Duct Systems I          1 3 2**
This course introduces the techniques used to lay out and fabricate duct work commonly found in HVAC systems. Emphasis is placed on the skills required to fabricate duct work. Upon completion, students should be able to lay out and fabricate simple duct work.

**AHR 160–Refrigerant Certification          1 0 1**
This course covers the requirements for the EPA certification examinations. Topics include small appliances, high pressure systems, and low pressure systems. Upon completion, students should be able to demonstrate knowledge of refrigerants and be prepared for the EPA certification examinations.

**AHR 210–Residential Building Code          1 2 2**
This course covers the residential building codes that are applicable to the design and installation of HVAC systems. Topics include current residential codes as applied to HVAC design, service, and installation. Upon completion, students should be able to demonstrate the correct usage of residential building codes that apply to specific areas of the HVAC trade.

**AHR 211–Residential System Design          2 2 3**
This course introduces the principles and concepts of conventional residential heating and cooling system design. Topics include heating and cooling load estimating, basic psychometrics, equipment selection, duct system selection, and system design. Upon completion, students should be able to design a basic residential heating and cooling system.

## ART

**ART 111–Art Appreciation          3 0 3**
This course introduces the origins and historical development of art. Emphasis is placed on the relationship of design principles to various art forms including but not limited to sculpture, painting, and architecture. Upon completion, students should be able to identify and analyze a variety of artistic styles, periods, and media. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**ART 113–Art Methods and Materials          2 2 3**
This course provides an overview of media and techniques. Emphasis is placed on exploration and manipulation of materials. Upon completion, students should be able to demonstrate familiarity with a variety of methods, materials, and processes.

**ART 114–Art History Survey I      3 0 3**
This course covers the development of art forms from ancient times to the Renaissance. Emphasis is placed on content, terminology, design, and style. Upon completion, students should be able to demonstrate an historical understanding of art as a product reflective of human social development. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**ART 115–Art History Survey II      3 0 3**
This course covers the development of art forms from the Renaissance to the present. Emphasis is placed on content, terminology, design, and style. Upon completion, students should be able to demonstrate an historical understanding of art as a product reflective of human social development. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**ART 116–Survey of American Art      3 0 3**
This course covers the development of American art forms from colonial times to the present. Emphasis is placed on architecture, painting, sculpture, graphics, and the decorative arts. Upon completion, students should be able to demonstrate understanding of the history of the American creative experience.

**ART 121–Design I      1 4 3**
This course introduces the elements and principles of design as applied to two-dimensional art. Emphasis is placed on the structural elements, the principles of visual organization, and the theories of color mixing and interaction. Upon completion, students should be able to understand and use critical and analytical approaches as they apply to two-dimensional visual art.

**ART 122–Design II      1 4 3**
This course introduces basic studio problems in three-dimensional visual design. Emphasis is placed on the structural elements and organizational principles as applied to mass and space. Upon completion, students should be able to apply three-dimensional design concepts. Prerequisites: ART 121

**ART 130–Basic Drawing      0 4 2**
This course introduces basic drawing techniques and is designed to increase observation skills. Emphasis is placed on the fundamentals of drawing. Upon completion, students should be able to demonstrate various methods and their application to representational imagery.

**ART 131–Drawing I      0 6 3**
This course introduces the language of drawing and the use of various drawing materials. Emphasis is placed on drawing techniques, media, and graphic principles. Upon completion, students should be able to demonstrate competence in the use of graphic form and various drawing processes.

**ART 132–Drawing II      0 6 3**
This course continues instruction in the language of drawing and the use of various materials. Emphasis is placed on experimentation in the use of drawing techniques, media, and graphic materials. Upon completion, students should be able to demonstrate increased competence in the expressive use of graphic form and techniques. Students will work with graphite, ink, pastel, and colored pencil. Prerequisites: ART 131

**ART 140–Basic Painting      0 4 2**
This course introduces the mechanics of painting. Emphasis is placed on the exploration of painting media through fundamental techniques. Upon completion, students should be able to demonstrate a basic understanding and application of painting.

**ART 171–Computer Art I      1 4 3**
This course introduces the use of the computer as a tool for solving visual problems. Emphasis is placed on fundamentals of computer literacy and design through bit-mapped image manipulation. Upon completion, students should be able to demonstrate an understanding of paint programs, printers, and scanners to capture, manipulate, and output images.

**ART 212–Gallery Assistantship I      0 2 1**
This course covers the practical application of display techniques. Emphasis is placed on preparation of artwork for installation, hardware systems, and exhibition graphics. Upon completion, students should be able to demonstrate basic gallery exhibition skills.

**ART 213–Gallery Assistantship II      0 2 1**
This course provides additional experience in display techniques. Emphasis is placed on preparation of artwork for exhibition, alternative methods of installation, hardware systems, and exhibition graphics. Upon completion, students should be able to demonstrate independent decision-making and exhibition expertise. Prerequisites: ART 212

**ART 231–Printmaking I      0 6 3**
This course introduces printmaking: its history, development techniques, and processes. Emphasis is placed on basic applications with investigation into image source and development. Upon completion, students should be able to produce printed images utilizing a variety of methods. Linocut, etching, drypoint and monoprints methods are explored.

**ART 240–Painting I      0 6 3**
This course introduces the language of painting and the use of various painting materials. Emphasis is placed on the understanding and use of various painting techniques, media, and color principles. Upon completion, students should be able to demonstrate competence in the use of creative processes directed toward the development of expressive form. Techniques in acrylic, alkyd and oil paint are emphasized.

**ART 241–Painting II**                 0 6 3
This course provides a continuing investigation of the materials, processes, and techniques of painting. Emphasis is placed on the exploration of expressive content using a variety of creative processes. Upon completion, students should be able to demonstrate competence in the expanded use of form and variety. Techniques in watercolor and transparent acrylic are emphasized. Prerequisites: ART 240

**ART 261–Photography I**                 1 4 3
This course introduces photographic equipment, theory, and processes. Emphasis is placed on camera operation, composition, darkroom technique, and creative expression. Upon completion, students should be able to successfully expose, develop, and print a well-conceived composition.

**ART 288–Studio**                 0 6 3
This course provides the opportunity for advanced self-determined work beyond the limits of regular studio course sequences. Emphasis is placed on creative self-expression and in-depth exploration of techniques and materials. Upon completion, students should be able to create original projects specific to media, materials, and techniques. Prerequisites: Limited to those who have completed a sequence of art courses in the proposed area of study.

## AUTOMOTIVE BODY REPAIR

**AUB 111–Painting & Refinishing I**     2 6 4
This course introduces the proper procedures for using automotive refinishing equipment and materials in surface preparation and application. Topics include federal, state, and local regulations, personal safety, refinishing equipment and materials, surface preparation, masking, application techniques, and other related topics. Upon completion, students should be able to identify and use proper equipment and materials in refinishing following accepted industry standards. *This is a diploma-level course.*

**AUB 112–Painting & Refinishing II**     2 6 4
This course covers advanced painting techniques and technologies with an emphasis on identifying problems encountered by the refinishing technician. Topics include materials application, color matching, correction of refinishing problems, and other related topics. Upon completion, students should be able to perform spot, panel, and overall refinishing repairs and identify and correct refinish problems. Prerequisites: AUB 111. *This is a diploma-level course.*

**AUB 114–Special Finishes**                 1 2 2
This course introduces multistage finishes, custom painting, and protective coatings. Topics include base coats, advanced intermediate coats, clear coats, and other related topics. Upon completion, students should be able

to identify and apply specialized finishes based on accepted industry standards. Prerequisites: AUB 111. *This is a diploma-level course.*

**AUB 121–Non-Structural Damage I**     1 4 3
This course introduces safety, tools, and the basic fundamentals of body repair. Topics include shop safety, damage analysis, tools and equipment, repair techniques, materials selection, materials usage, and other related topics. Upon completion, students should be able to identify and repair minor direct and indirect damage including removal/repairing/ replacing of body panels to accepted standards. *This is a diploma-level course.*

**AUB 122–Non-Structural Damage II**     2 6 4
This course covers safety, tools, and advanced body repair. Topics include shop safety, damage analysis, tools and equipment, advanced repair techniques, materials selection, materials usage, movable glass, and other related topics. Upon completion, students should be able to identify and repair or replace direct and indirect damage to accepted standards including movable glass and hardware. *This is a diploma-level course.*

**AUB 131–Structural Damage I**          2 4 4
This course introduces safety, equipment, structural damage analysis, and damage repairs. Topics include shop safety, design and construction, structural analysis and measurement, equipment, structural glass, repair techniques, and other related topics. Upon completion, students should be able to analyze and perform repairs to a vehicle which has received light/moderate structural damage. *This is a diploma-level course.*

**AUB 132–Structural Damage II**         2 6 4
This course provides an in-depth study of structural damage analysis and repairs to vehicles that have received moderate to heavy structural damage. Topics include shop safety, structural analysis and measurement, equipment, structural glass, advanced repair techniques, structural component replacement and alignment, and other related topics. Upon completion, students should be able to analyze and perform repairs according to industry standards. Prerequisites: AUB 131. *This is a diploma-level course.*

**AUB 134–Autobody MIG Welding**         1 4 3
This course covers the terms and procedures for welding the various metals found in today's autobody repair industry with an emphasis on personal/environmental safety. Topics include safety and precautionary measures, setup/operation of MIG equipment, metal identification methods, types of welds/joints, techniques, inspection methods, and other related topics. Upon completion, students should be able to demonstrate a basic knowledge of welding operations and safety procedures according to industry standards. *This is a diploma-level course.*

**AUB 136–Plastics & Adhesives      1 4 3**
This course covers safety, plastic and adhesive identification, and the various repair methods of automotive plastic components. Topics include safety, identification, preparation, material selection, and the various repair procedures including refinishing. Upon completion, students should be able to identify, remove, repair, and/or replace automotive plastic components in accordance with industry standards. *This is a diploma-level course.*

**AUB 162–Autobody Estimating      1 2 2**
This course provides a comprehensive study of autobody estimating. Topics include collision damage analysis, industry regulations, flat-rate and estimated time, and collision estimating manuals. Upon completion, students should be able to prepare and interpret a damage report. *This is a diploma-level course.*

## BIOLOGY

**BIO 111–General Biology I      3 3 4**
This course introduces the principles and concepts of biology. Emphasis is placed on basic biological chemistry, cell structure and function, metabolism and energy transformation, genetics, evolution, classification, and other related topics. Upon completion, students should be able to demonstrate understanding of life at the molecular and cellular levels. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

**BIO 112–General Biology II      3 3 4**
This course is a continuation of BIO 111. Emphasis is placed on organisms, biodiversity, plant and animal systems, ecology, and other related topics. Upon completion, students should be able to demonstrate comprehension of life at the organismal and ecological levels. Prerequisites: BIO 111. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

**BIO 120–Introductory Botany      3 3 4**
This course provides an introduction to the classification, relationships, structure, and function of plants. Topics include reproduction and development of seed and non-seed plants, levels of organization, form and function of systems, and a survey of major taxa. Upon completion, students should be able to demonstrate comprehension of plant form and function, including selected taxa of both seed and non-seed plants. Prerequisites: BIO 110 or BIO 111. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

**BIO 130–Introductory Zoology      3 3 4**
This course provides an introduction to the classification, relationships, structure, and function of major animal phyla. Emphasis is placed on levels of organization, reproduction, and development, comparative systems, and a survey of selected phyla. Upon completion, students should be able to demonstrate comprehension of animal form and function including comparative systems of selected groups. Prerequisites: BIO 110 or BIO 111. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

**BIO 155–Nutrition      3 0 3**
This course covers the biochemistry of foods and nutrients with consideration of the physiological effects of specialized diets for specific biological needs. Topics include cultural, religious, and economic factors that influence a person's acceptance of food as well as nutrient requirements of the various life stages. Upon completion, students should be able to identify the functions and sources of nutrients, the mechanisms of digestion, and the nutritional requirements of all age groups. Prerequisites: ENG 090, RED 090, or placement

**BIO 163–Basic Anat & Physiology      4 2 5**
This course provides a basic study of the structure and function of the human body. Topics include a basic study of the body systems as well as an introduction to homeostasis, cells, tissues, nutrition, acid-base balance, and electrolytes. Upon completion, students should be able to demonstrate a basic understanding of the fundamental principles of anatomy and physiology and their interrelationships. Prerequisites: ENG 090, RED 090, or placement

**BIO 165–Anatomy and Physiology I      3 3 4**
This course is the first of a two-course sequence which provides a comprehensive study of the anatomy and physiology of the human body. Topics include the structure, function, and interrelationship of organ systems with emphasis on the processes which maintain homeostasis. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships. Prerequisites: ENG 090, RED 090, or placement

**BIO 166–Anatomy and Physiology II      3 3 4**
This course is the second in a two-course sequence which provides a comprehensive study of the anatomy and physiology of the human body. Topics include the structure, function, and interrelationship of organ systems with emphasis on the processes which maintain homeostasis. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and the interrelationships of all body systems. Prerequisites: BIO 165

**BIO 175–General Microbiology**    2 2 3
This course covers principles of microbiology with emphasis on microorganisms and human disease. Topics include an over-view of microbiology and aspects of medical microbiology, identification and control of pathogens, disease transmission, host resistance, and immunity. Upon completion, students should be able to demonstrate knowledge of microorganisms and the disease process as well as aseptic and sterile techniques. Prerequisites: BIO 163 or BIO 166

## BLUEPRINT READING

**BPR 111–Blueprint Reading**    1 2 2
This course introduces the basic principles of blueprint reading. Topics include line types, orthographic projections, dimensioning methods, and notes. Upon completion, students should be able to interpret basic blueprints and visualize the features of a part.

**BPR 121–Blueprint Reading: Mech**    1 2 2
This course covers the interpretation of intermediate blueprints. Topics include tolerancing, auxiliary views, sectional views, and assembly drawings. Upon completion, students should be able to read and interpret a mechanical working drawing. Prerequisites: BPR 111

**BPR 130–Blueprint Reading/Const**    1 2 2
This course covers the interpretation of blueprints and specifications that are associated with the construction trades. Emphasis is placed on interpretation of details for foundations, floor plans, elevations, and schedules. Upon completion, students should be able to read and interpret a set of construction blueprints.

## BROADCAST PRODUCTION

**BPT 110–Intro to Broadcasting**    3 0 3
This course introduces the field of broadcasting and other electronic media. Emphasis is placed on the history, development, and current status of radio, television, and related industries. Upon completion, students should be able to demonstrate knowledge of regulations, organizational structure, revenue sources, historical development, and on-going operation of broadcasting and related industries.

**BPT 111–Broadcast Law & Ethics**    3 0 3
This course covers judicial, legislative, and administrative policies pertinent to the ethical and legal operation of broadcast and other electronic media organizations. Emphasis is placed on legal and ethical issues including First Amendment protection, FCC regulations, copyright, and libel laws. Upon completion, students should be able to demonstrate an understanding of the historical significance and modern-day application of important broadcast laws and policies.

**BPT 112–Broadcast Writing**    3 2 4
This course introduces proper copy and script writing techniques and formats for radio, television, and other electronic media. Emphasis is placed on creating effective scripts for programs and promotional materials, including commercial and public radio service announcements for a specific target audience. Upon completion, students should be able to understand and write copy and scripts according to standard industry formats.

**BPT 113–Broadcast Sales**    3 0 3
This course covers sales principles applicable to radio, television, cable, and other electronic media. Emphasis is placed on prospecting and servicing accounts, developing clients, and preparing sales presentations. Upon completion, students should be able to create a sales presentation based upon standard ratings reports, prospect for new customers, and understand account management.

**BPT 140–Intro to TV Systems**    2 0 2
This course introduces technical systems that allow production, transmission, and reception of television and other video media. Emphasis is placed on identifying components and equipment, describing their function within the video chain, and troubleshooting problems within the signal flow. Upon completion, students should be able to demonstrate an understanding of components and equipment in the video chain and provide basic preventive maintenance on equipment.

**BPT 196–Seminar in Contemporary
        Broadcasting & Issues**    1 0 1
This seminar introduces today's current issues in Broadcasting. Emphasis is placed on trends and topics affecting broadcast programming and technology. Upon completion students should be able to demonstrate the types of issues and broadcasting that affects the current media.

**BPT 220–Broadcast Marketing**    3 0 3
This course introduces broadcast marketing, including cultivating an audience, building an identity, and servicing customers. Topics include the use of effective promotional tools, marketing research, rating analysis, and the development of a unified marketing plan. Upon completion, students should be able to develop a broadcast marketing plan.

**BPT 231–Video/TV Production I**    2 6 4
This course covers the language of film/video, shot composition, set design, lighting, production planning, scripting, editing, and operation of video and television production equipment. Emphasis is placed on mastering the body of knowledge and techniques followed in producing all forms of video and television production. Upon completion, students should be able to produce basic video and television productions in a team environment.

**BPT 232–Video/TV Production II  2 6 4**
This course covers advanced video and television production. Emphasis is placed on field production, post-production, digital video effects, graphics, and multi-camera productions. Upon completion, students should be able to create productions that optimize the use of studio, field, and post-production equipment. Prerequisites: BPT 231

**BPT 235–TV Performance I  0 6 2**
This course provides hands-on experience in the operation of television studios and/or stations. Emphasis is placed on the application of skills through direct participation in the production or distribution of television programs. Upon completion, students should be able to demonstrate competence in performing key station and/or studio duties.

**BPT 236–TV Performance II  0 6 2**
This course provides hands-on experience in the operation of television studios and/or stations. Emphasis is placed on the application of skills through direct participation in the production or distribution of television programs. Upon completion, students should be able to demonstrate competence in performing key station and/or studio duties. Prerequisites: BPT 235

**BPT 250–Institutional Video  2 3 3**
This course covers development and production of non-broadcast video productions for clients. Emphasis is placed on satisfying client objectives, including interviewing, research, site surveying, script review, photography, and post-production. Upon completion, students should be able to plan, write, shoot, and edit an institutional video designed to meet a client's objectives.

**BPT 255–Computer-Based Prod.  2 3 3**
This course covers digital systems used for video, audio, and multimedia production. Emphasis is placed on computer-based tools integrating digital production with analog broadcast-related production. Upon completion, students should be able to understand and operate basic tools for video graphics, video capture, multimedia authoring, sound capture, and digital audio production. Prerequisites: CIS 110

## BUSINESS

**BUS 110–Introduction to Business  3 0 3**
This course provides a survey of the business world. Topics include the basic principles and practices of contemporary business. Upon completion, students should be able to demonstrate an understanding of business concepts as a foundation for studying other business subjects.

**BUS 115–Business Law I  3 0 3**
This course introduces the ethics and legal framework of business. Emphasis is placed on contracts, negotiable instruments, Uniform Commercial Code, and the working of the court systems. Upon completion, students should be able to apply ethical issues and laws covered to selected business decision-making situations.

**BUS 116–Business Law II  3 0 3**
This course continues the study of ethics and business law. Emphasis is placed on bailments, sales, risk-bearing, forms of business ownership, and copyrights. Upon completion, students should be able to apply ethical issues and laws covered to selected business decision-making situations. Prerequisites: BUS 115

**BUS 121–Business Math  2 2 3**
This course covers fundamental mathematical operations and their application to business problems. Topics include payroll, pricing, interest and discount, commission, taxes, and other pertinent uses of mathematics in the field of business. Upon completion, students should be able to apply mathematical concepts to business.

**BUS 137–Principles of Management  3 0 3**
This course is designed to be an overview of the major functions of management. Emphasis is placed on planning, organizing, controlling, directing, and communicating. Upon completion, students should be able to work as contributing members of a team utilizing these functions of management.

**BUS 153–Human Resource Mgt.  3 0 3**
This course introduces the functions of personnel/human resource management within an organization. Topics include equal opportunity and the legal environment, recruitment and selection, performance appraisal, employee development, compensation planning, and employee relations. Upon completion, students should be able to anticipate and resolve human resource concerns.

**BUS 225–Business Finance  2 2 3**
This course provides an overview of business financial management. Emphasis is placed on financial statement analysis, time value of money, management of cash flow, risk and return, and sources of financing. Upon completion, students should be able to interpret and apply the principles of financial management. Prerequisites: ACC 120

**BUS 240–Business Ethics  3 0 3**
This course introduces contemporary and controversial ethical issues that face the business community. Topics include moral reasoning, moral dilemmas, law and morality, equity, justice and fairness, ethical standards, and moral development. Upon completion, students should be able to demonstrate an understanding of their moral responsibilities and obligations as members of the workforce and society.

**BUS 253–Leadership and Mgt Skills    3 0 3**
This course includes a study of the qualities, behaviors, and personal styles exhibited by leaders. Emphasis is placed on coaching, counseling, team building, and employee involvement. Upon completion, students should be able to identify and exhibit the behaviors needed for organizational effectiveness.

**BUS 260–Business Communication    3 0 3**
This course is designed to develop skills in writing business communications. Emphasis is placed on business reports, correspondence, and professional presentations. Upon completion, students should be able to communicate effectively in the work place. Prerequisites: ENG 111 and OST 130

**BUS 280–REAL Small Business    4 0 4**
This course introduces hands-on techniques and procedures for planning and opening a small business, including the personal qualities needed for entrepreneurship. Emphasis is placed on market research, finance, time management, and day-to-day activities of owning/operating a small business. Upon completion, students should be able to write and implement a viable business plan and seek funding.

## CARPENTRY

**CAR 111–Carpentry I    4 15 9**
This course introduces the theory and construction methods associated with the building industry, including framing, materials, tools, and equipment. Topics include safety, hand/power tool use, site preparation, measurement and layout, footings and foundations, construction framing, and other related topics. Upon completion, students should be able to safely lay out and perform basic framing skills with supervision. *This is a diploma-level course.*

**CAR 112–Carpentry II    4 15 9**
This course covers the advanced theory and construction methods associated with the building industry including framing and exterior finishes. Topics include safety, hand/power tool use, measurement and layout, construction framing, exterior trim and finish, and other related topics. Upon completion, students should be able to safely frame and apply exterior finishes to a residential building with supervision. *This is a diploma-level course.*

**CAR 113–Carpentry III    3 9 6**
This course covers interior trim and finishes. Topics include safety, hand/power tool use, measurement and layout, specialty framing, interior trim and finishes, cabinetry, and other related topics. Upon completion, students should be able to safely install various interior trim and finishes in a residential building with supervision. Prerequisites: CAR 111. *This is a diploma-level course.*

**CAR 114–Residential Bldg Codes    3 0 3**
This course covers building codes and the requirements of state and local construction regulations. Emphasis is placed on the minimum requirements of the North Carolina building codes related to residential structures. Upon completion, students should be able to determine if a structure is in compliance with North Carolina building codes.

**CAR 115–Res Planning/Estimating    3 0 3**
This course covers project planning, management, and estimating for residential or light commercial buildings. Topics include planning and scheduling, interpretation of working drawings and specifications, estimating practices, and other related topics. Upon completion, students should be able to perform quantity take-offs and cost estimates. Prerequisites: BPR 130

## CHEMISTRY

**CHM 121–Foundations of Chemistry    3 0 3**
This course is designed for those who have no previous high school chemistry or a grade of C or less in high school chemistry. Topics include matter, structure of the atom, nomenclature, chemical equations, bonding and reactions; mathematical topics include measurements, scientific notation, and stoichiometry. Upon completion, students should be able to demonstrate an understanding of chemical concepts and an ability to solve related problems in subsequent chemistry courses. The course will be taught with an emphasis on chemistry in the health sciences and will include an introduction to organic and biological chemistry. *This course is intended for all Associate degree programs.*

**CHM 121A–Foundations of Chemistry Laboratory    0 2 1**
This course is a laboratory for CHM 121. Emphasis is placed on laboratory experiences that enhance materials presented in CHM 121. Upon completion, students should be able to utilize basic laboratory procedures and apply them to chemical principles presented in CHM 121. Corequisites: CHM 121

**CHM 151–General Chemistry I    3 3 4**
This course covers fundamental principles and laws of chemistry. Topics include measurement, atomic and molecular structure, periodicity, chemical reactions, chemical bonding, stoichiometry, thermochemistry, gas laws, and solutions. Upon completion, students should be able to demonstrate an understanding of fundamental chemical laws and concepts as needed in CHM 152. Prerequisite: Placement in MAT 161 or permission of instructor. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

**CHM 152–General Chemistry II**    3 3 4
This course provides a continuation of the study of the fundamental principles and laws of chemistry. Topics include kinetics, equilibrium, ionic and redox equations, acid-base theory, electrochemistry, thermodynamics, introduction to nuclear and organic chemistry, and complex ions. Upon completion, students should be able to demonstrate an understanding of chemical concepts as needed to pursue further study in chemistry and related professional fields. Prerequisites: CHM 151 *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

## INFORMATION SYSTEMS

**CIS 110–Introduction to Computers**    2 2 3
This course provides an introduction to computers and computing. Topics include the impact of computers on society, ethical issues, and hardware/software applications, including spreadsheets, databases, word processors, graphics, the Internet, and operating systems. Upon completion, students should be able to demonstrate an understanding of the role and function of computers and use the computer to solve problems. Prerequisite: A satisfactory score on the College's typing proficiency examination or departmental permission is required.

**CIS 115–Intro to Prog & Logic**    2 2 3
This course introduces computer programming and problem solving in a programming environment, including an introduction to operating systems, text editor, and a language translator. Topics include language syntax, data types, program organization, problem-solving methods, algorithm design, and logic control structures. Upon completion, students should be able to manage files with operating system commands, use top-down algorithm design, and implement algorithmic solutions in a programming language. Prerequisites: MAT 080 and CIS 110.

**CIS 120–Spreadsheet I**    2 2 3
This course introduces basic spreadsheet design and development. Topics include writing formulas, using functions, enhancing spreadsheets, creating charts, and printing. Upon completion, students should be able to design and print basic spreadsheets and charts. Prerequisites: CIS 110

**CIS 130–Survey of Operating Sys**    2 3 3
The course covers operating system concepts which are necessary for maintaining and using computer systems. Topics include disk, file, and directory structures; installation and setup; resource allocation, optimization, and configuration; system security; and other related topics. Upon completion, students should be able to install and configure operating systems and optimize performance. Prerequisite: CIS 110

**CIS 145–Operating Sys.- Single-User**    2 2 3
This course introduces operating systems concepts for single-user systems. Topics include hardware management, file and memory management, system configuration/optimization, and utilities. Upon completion, students should be able to perform operating system functions at the support level in a single-user environment. Corequisites: CIS 130

**CIS 152–Database Concepts & Apps**    2 2 3
This course introduces database design and creation using a DBMS product. Topics include database terminology, usage in industry, design theory, types of DBMS models, and creation of simple tables, queries, reports, and forms. Upon completion, students should be able to create simple database tables, queries, reports, and forms which follow acceptable design practices. Prerequisites: CIS 110 or CIS 115

**CIS 153–Database Applications**    2 2 3
This course covers advanced database functions continued from CIS 152. Topics include manipulating multiple tables, advanced queries, screens and reports, linking, and command files. Upon completion, students should be able to create multiple table systems that demonstrate updates, screens, and reports representative of industry requirements. Prerequisites: CIS 152

**CIS 164–DTP Layout & Design**    2 2 3
This course introduces the fundamentals of design and page layout. Emphasis is placed on page layout organization, typography, and color. Upon completion, students should be able to create projects that visually enhance communication.

**CIS 169–Business Presentations**    1 2 2
This course provides hands-on experience with a graphics presentation package. Topics include terminology, effective chart usage, design and layout, integrating hardware components, and enhancing presentations with text and graphics. Upon completion, students should be able to design and demonstrate an effective presentation. Prerequisites: CIS 110, CIS 120

**CIS 172–Intro to the Internet**    2 3 3
This course introduces the various navigational tools and services of the Internet. Topics include using Internet protocols, search engines, file compression/decompression, FTP, e-mail, listservers, and other related topics. Upon completion, students should be able to use Internet resources, retrieve/decompress files, and use e-mail, FTP, and other Internet tools. Prerequisite: CIS 110

**CIS 215–Hardware Install/Maint**    2 3 3
This course covers the basic hardware of a personal computer, including operations and interactions with software. Topics include component identification, the memory system,

peripheral installation and configuration, preventive maintenance, and diagnostics and repair. Upon completion, students should be able to select appropriate computer equipment, upgrade and maintain existing equipment, and troubleshoot and repair non-functioning personal computers. Prerequisites: CIS 110 or CIS 115.

**CIS 216–Software Install/Maint      1 2 2**
This course introduces the installation and troubleshooting aspects of personal computer software. Emphasis is placed on initial installation and optimization of system software, commercial programs, system configuration files, and device drivers. Upon completion, students should be able to install, upgrade, uninstall, optimize, and troubleshoot personal computer software. Prerequisites: CIS 130. Corequisite: CIS 215

**CIS 217–Computer Train & Support      2 2 3**
This course introduces computer training and support techniques. Topics include methods of adult learning, training design, delivery, and evaluation, creating documentation, and user support methods. Upon completion, students should be able to design and implement training and provide continued support for computer users. Prerequisites: Completion of 30 hours in Information Systems Programming.

**CIS 220–Spreadsheets II      1 2 2**
This course covers advanced spreadsheet design and development. Topics include advanced functions, charting, macros, databases, and linking. Upon completion, students should be able to demonstrate competence in designing complex spreadsheets. Prerequisites: CIS 120

**CIS 225–Integrated Software      1 2 2**
This course provides strategies to perform data transfer among software programs. Emphasis is placed on data interchange among word processors, spreadsheets, presentation graphics, databases, and communications products. Upon completion, students should be able to integrate data to produce documents using multiple technologies. Prerequisites: CIS 120, CIS 152, and OST 136

**CIS 245–Operating Sys.- Multi-User      2 3 3**
This course includes operating systems concepts for multi-user systems. Topics include hardware management, file and memory management, system configuration/optimization, and utilities. Upon completion, students should be able to perform operating system functions in a multi-user environment. Prerequisites: CIS 145

**CIS 260–Business Graphics Apps      2 2 3**
This course utilizes graphics software in a variety of business applications. Topics include terminology, design and evaluation, graphics formats and conversion, practical applications of graphics software, and integration of peripherals. Upon completion, students

should be able to create and incorporate graphic designs to enhance business communications. Prerequisites: CIS 110

## CRIMINAL JUSTICE

**CJC 100–Basic Law Enformnt Trn      9 27 18**
This course covers the skills and knowledge needed for entry-level employment as a law enforcement officer in North Carolina. Emphasis is placed on topics and areas as defined by the North Carolina Administrative Code. Upon completion, students should be able to demonstrate competence in the topics and areas required for the state comprehensive examination. *This is a certificate-level course.*

**CJC 111–Intro to Criminal Justice      3 0 3**
This course introduces the components and processes of the criminal justice system. Topics include history, structure, functions, and philosophy of the criminal justice system and their relationship to life in our society. Upon completion, students should be able to define and describe the major system components and their interrelationships and evaluate career options.

**CJC 112–Criminology      3 0 3**
This course introduces deviant behavior as it relates to criminal activity. Topics include theories of crime causation; statistical analysis of criminal behavior; past, present, and future social control initiatives; and other related topics. Upon completion, students should be able to explain and discuss various theories of crime causation and societal response.

**CJC 113–Juvenile Justice      3 0 3**
This course covers the juvenile justice system and related juvenile issues. Topics include an overview of the juvenile justice system, treatment and prevention programs, special areas and laws unique to juveniles, and other related topics. Upon completion, students should be able to identify/discuss juvenile court structure/procedures, function and jurisdiction of juvenile agencies, processing/detention of juveniles, and case disposition.

**CJC 114–Investigative Photography      1 2 2**
This course covers the operation of various photographic equipment and its application to criminal justice. Topics include using various cameras, proper exposure of film, developing film/prints, and preparing photographic evidence. Upon completion, students should be able to demonstrate and explain the role of photography and proper film exposure and development techniques.

**CJC 120–Interviews/Interrogations      1 2 2**
This course covers basic and special techniques employed in criminal justice interviews and interrogations. Emphasis is placed on the interview/interrogation process, including interpretation of verbal and physical behavior and legal perspectives. Upon completion, students

should be able to conduct interviews/ interrogations in a legal, efficient, and professional manner and obtain the truth from suspects, witnesses, and victims.

**CJC 121–Law Enformnt Operations        3 0 3**
This course introduces fundamental law enforcement operations. Topics include the contemporary evolution of law enforcement operations and related issues. Upon completion, students should be able to explain theories, practices, and issues related to law enforcement operations.

**CJC 122–Community Policing        3 0 3**
This course covers the historical, philosophical, and practical dimensions of community policing. Emphasis is placed on the empowerment of police and the community to find solutions to problems by forming partnerships. Upon completion, students should be able to define community policing, describe how community policing strategies solve problems, and compare community policing to traditional policing.

**CJC 131–Criminal Law        3 0 3**
This course covers the history/evolution/ principles and contemporary applications of criminal law. Topics include sources of substantive law, classification of crimes, parties to crime, elements of crimes, matters of criminal responsibility, and other related topics. Upon completion, students should be able to discuss the sources of law and identify, interpret, and apply the appropriate statutes/elements.

**CJC 132–Court Procedure & Evidence        3 0 3**
This course covers judicial structure/ process/procedure from incident to disposition, kinds and degrees of evidence, and the rules governing admissibility of evidence in court. Topics include consideration of state and federal courts, arrest, search and seizure laws, exclusionary and statutory rules of evidence, and other related issues. Upon completion, students should be able to identify and discuss procedures necessary to establish a lawful arrest/search, proper judicial procedures, and the admissibility of evidence.

**CJC 141–Corrections        3 0 3**
This course covers the history, major philosophies, components, and current practices and problems of the field of corrections. Topics include historical evolution, functions of the various components, alternatives to incarceration, treatment programs, inmate control, and other related topics. Upon completion, students should be able to explain the various components, processes, and functions of the correctional system.

**CJC 151–Intro to Loss Prevention        3 0 3**
This course introduces the concepts and methods related to commercial and private security systems. Topics include the historical, philosophical, and legal basis of security, with emphasis on security surveys, risk analysis, and associated functions. Upon completion, students should be able to demonstrate and understand security systems, risk management, and the laws relative to loss prevention.

**CJC 191–Selected Topics in Corr.        0 3 1**
A study of current, future, and controversial theories and practices in corrections. A critical look at punishment vs. rehabilitation along with philiosophical concepts of incarceration. Alternatives to incarceration as well as post-incarceration programs and recidivism rates.

**CJC 211–Counseling        3 0 3**
This course introduces the basic elements of counseling and specific techniques applicable to the criminal justice setting. Topics include observation, listening, recording, interviewing, and problem exploration necessary to form effective helping relationships. Upon completion, students should be able to discuss and demonstrate the basic techniques of counseling.

**CJC 212–Ethics & Comm Relations        3 0 3**
This course covers ethical considerations and accepted standards applicable to criminal justice organizations and professionals. Topics include ethical systems; social change, values, and norms; cultural diversity; citizen involvement in criminal justice issues; and other related topics. Upon completion, students should be able to apply ethical considerations to the decision-making process in identifiable criminal justice situations.

**CJC 213–Substance Abuse        3 0 3**
This course is a study of substance abuse in our society. Topics include the history and classifications of drug abuse and the social, physical, and psychological impact of drug abuse. Upon completion, students should be able to identify various types of drugs, their effects on human behavior and society, and treatment modalities.

**CJC 214–Victimology        3 0 3**
This course introduces the study of victims. Emphasis is placed on roles/characteristics of victims, victim interaction with the criminal justice system and society, current victim assistance programs, and other related topics. Upon completion, students should be able to discuss and identify victims, the uniqueness of victims' roles, and current victim assistance programs.

**CJC 215–Organization and Adm.        3 0 3**
This course introduces the components and functions of organization and administration as it applies to the agencies of the criminal justice system. Topics include operations/ functions of organizations; recruiting, training, and retention of personnel; funding and budgeting; communications; span of control and discretion; and other related topics. Upon completion, students should be able to identify and discuss the basic components and functions of a criminal justice organization and its administrative operations.

**CJC 221–Investigative Principles        3 2 4**
This course introduces the theories and fundamentals of the investigative process. Topics include crime scene/incident processing,

information gathering techniques, collection/preservation of evidence, preparation of appropriate reports, court presentations, and other related topics. Upon completion, students should be able to identify, explain, and demonstrate the techniques of the investigative process, report preparation, and courtroom presentation.

**CJC 222–Criminalistics          3 0 3**
This course covers the functions of the forensic laboratory and its relationship to successful criminal investigations and prosecutions. Topics include advanced crime scene processing, investigative techniques, current forensic technologies, and other related topics. Upon completion, students should be able to identify and collect relevant evidence at simulated crime scenes and request appropriate laboratory analysis of submitted evidence.

**CJC 223–Organized Crime          3 0 3**
This course introduces the evolution of traditional and non-traditional organized crime and its effect on society and the criminal justice system. Topics include identifying individuals and groups involved in organized crime, areas of criminal activity, legal and political responses to organized crime, and other related topics. Upon completion, students should be able to identify the groups and activities involved in organized crime and the responses of the criminal justice system.

**CJC 225–Crisis Intervention          3 0 3**
This course introduces critical incident intervention and management techniques as they apply to operational criminal justice practitioners. Emphasis is placed on the victim/offender situation as well as job-related high stress, dangerous, or problem-solving citizen contacts. Upon completion, students should be able to provide insightful analysis of emotional, violent, drug-induced, and other critical and/or stressful incidents that require field analysis and/or resolution.

**CJC 231–Constitutional Law          3 0 3**
The course covers the impact of the Constitution of the United States and its amendments on the criminal justice system. Topics include the structure of the Constitution and its amendments, court decisions pertinent to contemporary criminal justice issues, and other related topics. Upon completion, students should be able to identify/discuss the basic structure of the United States Constitution and the rights/procedures as interpreted by the courts.

**CJC 232–Civil Liability          3 0 3**
This course covers liability issues for the criminal justice professional. Topics include civil rights violations, tort liability, employment issues, and other related topics. Upon completion, students should be able to explain civil trial procedures and discuss contemporary liability issues.

**CJC 233–Correctional Law          3 0 3**
This course introduces statutory/case law pertinent to correctional concepts, facilities, and related practices. Topics include examination of major legal issues encompassing incarceration, probation, parole, restitution, pardon, restoration of rights, and other related topics. Upon completion, students should be able to identify/discuss legal issues which directly affect correctional systems and personnel.

**CJC 241–Community-Based Corr.          3 0 3**
This course covers programs for convicted offenders that are used both as alternatives to incarceration and in post-incarcertion situations. Topics include offenders, diversion, house arrest, restitution, community service, probation and parole, including both public and private participation, and other related topics. Upon completion, students should be able to identify/discuss the various programs from the perspective of the criminal justice professional, the offender, and the community.

**CJC 291–Selected Topics in
          Criminal Justice          0 3 1**
This course offers fourth seminar criminal justice students an opportunity to examine relevant and criminal issues facing our society. A seminar format is utilized to encourage the critical analysis of information.

## COOPERATIVE EDUCATION

**COE 111–Co-op Work Experience I          0 10 1**
This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**COE 122–Co-op Work Experience II          0 20 2**
This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

## COMMUNICATIONS

**COM 231–Public Speaking          3 0 3**
This course provides instruction and experience in preparation and delivery of speeches within a public setting and group discussion. Emphasis is placed on research, preparation, delivery, and evaluation of informative, persuasive, and special occasion public speaking. Upon completion, students should be able to prepare and deliver well-organized speeches and participate in group discussion

with appropriate audiovisual support. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in speech/communication.

## COSMETOLOGY

**COS 111–Cosmetology Concepts I**    4 0 4
This course introduces basic cosmetology concepts. Topics include safety, first aid, sanitation, bacteriology, anatomy, diseases and disorders, hygiene, product knowledge, chemistry, ethics, manicures, and other related topics. Upon completion, students should be able to safely and competently apply cosmetology concepts in the salon setting. Corequisites: COS 112

**COS 112–Salon I**    0 24 8
This course introduces basic salon services. Topics include scalp treatments, shampooing, rinsing, hair color, design, haircutting, permanent waving, pressing, relaxing, wigs, and other related topics. Upon completion, students should be able to safely and competently demonstrate salon services. Corequisites: COS 111

**COS 113–Cosmetology Concepts II**    4 0 4
This course covers more comprehensive cosmetology concepts. Topics include safety, product knowledge, chemistry, manicuring, chemical restructuring, and hair coloring. Upon completion, students should be able to safely and competently apply these cosmetology concepts in the salon setting. Prerequisites: COS 111 and COS 112. Corequisites: COS 114

**COS 114–Salon II**    0 24 8
This course provides experience in a simulated salon setting. Topics include basic skin care, manicuring, nail application, scalp treatments, shampooing, rinsing, hair color, design, haircutting, chemical restructuring, pressing, wigs, and other related topics. Upon completion, students should be able to safely and competently demonstrate these salon services. Prerequisites: COS 112. Corequisites: COS 113

**COS 115–Cosmetology Concepts III**    4 0 4
This course covers more comprehensive cosmetology concepts. Topics include safety, product knowledge, salon management, salesmanship, skin care, electricity/light therapy, wigs, thermal hair styling, lash and brow tinting, superfluous hair removal, and other related topics. Upon completion, students should be able to safely and competently apply these cosmetology concepts in the salon setting. Prerequisites: COS 111 and COS 112. Corequisites: COS 116

**COS 116–Salon III**    0 18 6
This course provides comprehensive experience in a simulated salon setting. Emphasis is placed on intermediate-level of skin care, manicuring, scalp treatments, shampooing,

hair color, design, haircutting, chemical restructuring, pressing, and other related topics. Upon completion, students should be able to safely and competently demonstrate these salon services. Prerequisites: COS 112. Corequisites: COS 115

**COS 117–Cosmetology Concepts IV**    2 0 2
This course covers advanced cosmetology concepts. Topics include chemistry and hair structure, advanced cutting and design, and an overview of all cosmetology concepts in preparation for the licensing examination. Upon completion, students should be able to demonstrate an understanding of these cosmetology concepts and meet program completion requirements. Prerequisites: COS 111 and COS 112. Corequisites: COS 118

**COS 118–Salon IV**    0 21 7
This course provides advanced experience in a simulated salon setting. Emphasis is placed on efficient and competent delivery of all salon services in preparation for the licensing examination and employment. Upon completion, students should be able to demonstrate competence in program requirements and the areas covered on the Cosmetology Licensing Examination and meet entry-level employment requirements. Prerequisites: COS 114 and COS 116. Corequisites: COS 117

## COMPUTER SCIENCE

**CSC 138–RPG Programming**    2 3 3
This course introduces computer programming using the RPG programming language. Topics include input/output operations, sequence, selection, iteration, arithmetic operations, arrays/tables, and other related topics. Upon completion, students should be able to design, code, test, and debug RPG language programs.

**CSC 139–Visual BASIC Programming**    2 3 3
This course introduces event-driven computer programming using the Visual BASIC programming language. Topics include input/output operations, sequence, selection, iteration, arithmetic operations, arrays, forms, sequential files, and other related topics. Upon completion, students should be able to design, code, test, and debug Visual BASIC language programs. Prerequisite: CIS 115

**CSC 141–Visual C++ Programming**    2 3 3
This course introduces event-driven computer programming using the Visual C++ programming language. Topics include input/output operations, sequence, selection, iteration, arithmetic operations, arrays, and other related topics. Upon completion, students should be able to design, code, test, and debug Visual C++ language programs. Prerequisite: CIS 115

**CSC 238–Advanced RPG**  2 3 3
This course is a continuation of CSC 138 using RPG with structured programming principles. Emphasis is placed on advanced arrays/tables, file management/processing techniques, data structures, sub-programs, interactive processing, sort/merge routines, and libraries. Upon completion, students should be able to design, code, test, debug, and document programming solutions. Prerequisites: CSC 138

**CSC 239–Advanced Visual Basic**  2 3 3
This course is a continuation of CSC 139 using Visual Basic with structured programming principles. Emphasis is placed on advanced arrays/tables, file management/processing techniques, data structures, sub-programs, interactive processing, sort/merge routines, and libraries. Upon completion, students should be able to design, code, test, debug, and document programming solutions.

**CSC 241–Advanced Visual C++**  2 3 3
This course is a continuation of CSC 141 using Visual C++ with object-oriented programming principles. Emphasis is placed on advanced arrays, file management/processing techniques, data structures, sub-programs, interactive processing, algorithms, and libraries. Upon completion, students should be able to design, code, test, debug, and document programming solutions.

**CSC 248–Adv Internet Progr**  2 3 3
This course covers advanced programming skills required to design Internet applications. Emphasis is placed on programming techniques required to support network applications. Upon completion, students should be able to design, code, debut, and document network-based programming solutions to various real-world problems using an appropriate programming language.

## CONSTRUCTION

**CST 115–Drywall Installation**  1 3 2
This course introduces theory and construction methods associated with drywall installation and finish. Topics include safety, tool use, measurement and layout, and materials and procedures used to install and finish drywall products. Upon completion, students should be able to properly lay out, cut, install, and finish drywall products with supervision.

## DRAFTING

**DDF 221–Design Drafting Project**  0 4 2
This course incorporates ideas from concept to final design. Topics include reverse engineering, design for manufacturability, and mock-up construction. Upon completion, students should be able to generate working drawings and models based on physical design parameters. Prerequisites: DFT 111, DFT 112, and DFT 151

**DFT 111–Technical Drafting I**  2 6 4
This course introduces basic drafting skills, equipment, and applications. Topics include sketching, measurements, lettering, dimensioning, geometric construction, orthographic projections and pictorials drawings, sections, and auxiliary views. Upon completion, students should be able to understand and apply basic drawing principles and practices.

**DFT 112–Technical Drafting II**  2 6 4
This course provides for advanced drafting practices and procedures. Topics include detailed working drawings, hardware, fits and tolerances, assembly and sub-assembly, geometric dimensioning and tolerancing, intersections, and developments. Upon completion, students should be able to produce detailed working drawings.Prerequisites: DFT 111

**DFT 119–Basic CAD**  1 2 2
This course introduces computer-aided drafting software for specific technologies to non-drafting majors. Emphasis is placed on understanding the software command structure and drafting standards for specific technical fields. Upon completion, students should be able to create and plot basic drawings.

**DFT 121–Intro to GD & T**  1 2 2
This course introduces basic geometric dimensioning and tolerancing principles. Topics include symbols, annotation, theory, and applications. Upon completion, students should be able to interpret and apply basic geometric dimensioning and tolerancing principles to drawings.

**DFT 151–CAD I**  2 3 3
This course introduces CAD software as a drawing tool. Topics include drawing, editing, file management, and plotting. Upon completion, students should be able to produce and plot a CAD drawing.

**DFT 152–CAD II**  2 3 3
This course is a continuation of DFT 151. Topics include advanced two-dimensional, three-dimensional, and solid modeling and extended CAD applications. Upon completion, students should be able to generate and manage CAD drawings and models to produce engineering documents. Prerequisites: DFT 151

**DFT 153–CAD III**  2 3 3
This course covers basic principles of three-dimensional CAD wireframe and surface models. Topics include user coordinate systems, three-dimensional viewpoints, three-dimensional wireframes, and surface components and viewpoints. Upon completion, students should be able to create and manipulate three-dimensional wireframe and surface models.

**DFT 231–Jig & Fixture Design**     1 2 2
This course introduces the study of jigs and fixtures. Topics include different types, components, and uses of jigs and fixtures. Upon completion, students should be able to analyze, design, and complete a set of working drawings for a jig or fixture. Prerequisites: DFT 112 and MEC 210, MEC 250, or MEC 252

## DRAMA/THEATRE

**DRA 111–Theatre Appreciation**     3 0 3
This course provides a study of the art, craft, and business of the theatre. Emphasis is placed on the audience's appreciation of the work of the playwright, director, actor, designer, producer, and critic. Upon completion, students should be able to demonstrate a vocabulary of theatre terms and to recognize the contributions of various theatre artists. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**DRA 124–Readers Theatre**     3 0 3
This course provides a theoretical and applied introduction to the medium of readers theatre. Emphasis is placed on the group performance considerations posed by various genres of literature. Upon completion, students should be able to adapt and present a literary script following the conventions of readers theatre.

**DRA 128–Children's Theatre**     3 0 3
This course introduces the philosophy and practice involved in producing plays for young audiences. Topics include the selection of age-appropriate scripts and the special demands placed on directors, actors, designers, and educators in meeting the needs of young audiences. Upon completion, students should be able to present and critically discuss productions for children.

## ECONOMICS

**ECO 251–Prin of Microeconomics**     3 0 3
This course introduces economic analysis of choices made by individuals, businesses, and industries in the market economy. Topics include the price mechanism, supply and demand, optimizing economic behavior, costs and revenue, market structures, factor markets, income distribution, market failure, and government intervention. Upon completion, students should be able to identify and evaluate consumer and business alternatives in order to efficiently achieve economic objectives.

**ECO 252–Prin of Macroeconomics**     3 0 3
This course introduces economic analysis of aggregate employment, income, and prices. Topics include major schools of economic thought; aggregate supply and demand; economic measures, fluctuations, and growth; money and banking; stabilization techniques; and international trade. Upon completion, students should be able to evaluate national economic components, conditions, and alternatives for achieving socioeconomic goals. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

## EDUCATION

**EDU 111–Early Childhood Cred I**     2 0 2
This course introduces early childhood education and the role of the teacher in environments that encourage exploration and learning. Topics include professionalism, child growth and development, individuality, family, and culture. Upon completion, students should be able to identify and demonstrate knowledge of professional roles, major areas of child growth and development, and diverse families.

**EDU 112–Early Childhood Cred II**     2 0 2
This course introduces developmentally appropriate practices, positive guidance, and standards of health, safety, and nutrition. Topics include the learning environment, planning developmentally appropriate activities, positive guidance techniques, and health, safety, and nutrition standards. Upon completion, students should be able to demonstrate developmentally appropriate activities and positive guidance techniques and describe health/sanitation/nutrition practices that promote healthy environments for children.

**EDU 113–Family/Early Child Cred**     2 0 2
This course covers business/professional practices for family early childhood providers, developmentally appropriate practices, positive guidance, and methods of providing a safe and healthy environment. Topics include developmentally appropriate practices; health, safety and nutrition; and business and professionalism. Upon completion, students should be able to develop a handbook of policies, procedures, and practices for a family child care home.

**EDU 116–Intro to Education**     3 2 4
This course introduces the American educational system and the teaching profession. Topics include historical and philosophical foundations of education, contemporary educational trends and issues, curriculum development, and observation and participation in public school classrooms. Upon completion, students should be able to relate classroom observations to the roles of teachers and schools and the process of teacher education.

**EDU 131–Child, Family, & Commun**     3 0 3
This course covers the relationships between the families, programs for children/schools, and the community. Emphasis is placed on establishing and maintaining positive collaborative relationships with families and community resources. Upon completion, students should be able to demonstrate strategies for

effectively working with diverse families and identifying and utilizing community resources.

### EDU 144–Child Development I    3 0 3
This course covers the theories of child development and the developmental sequences of children from conception through the pre-school years for early childhood educators. Emphasis is placed on sequences in physical/motor, social, emotional, cognitive, and language development and appropriate experiences for the young child. Upon completion, students should be able to identify developmental milestones, plan experiences to enhance development, and describe appropriate interaction techniques and environments for typical/atypical development.

### EDU 145–Child Development II    3 0 3
This course covers theories of child development and developmental sequences of children from pre-school through middle childhood for early childhood educators. Emphasis is placed on characteristics of physical/motor, social, emotional, and cognitive/language development and appropriate experiences for children. Upon completion, students should be able to identify developmental characteristics, plan experiences to enhance development, and describe appropriate interaction techniques and environments.

### EDU 146–Child Guidance    3 0 3
This course introduces practical principles and techniques for developmentally appropriate guidance. Emphasis is placed on encouraging self-esteem and cultural awareness, effective communication skills, and direct and indirect guidance techniques and strategies. Upon completion, students should be able to demonstrate strategies which encourage positive social interactions, promote conflict resolution, and develop self-control, self-motivation, and self-esteem in children.

### EDU 151–Creative Activities    3 0 3
This course covers creative learning environments, planning and implementing developmentally appropriate experiences, and developing appropriate teaching materials for the classroom. Emphasis is placed on creative activities for children in art, music, movement and physical skills, and dramatics. Upon completion, students should be able to select and evaluate developmentally appropriate learning materials and activities.

### EDU 153–Health, Safety, & Nutrit    3 0 3
This course focuses on promoting and maintaining the health and well-being of children. Topics include health and nutritional needs, safe and healthy environments, and recognition and reporting of child abuse and neglect. Upon completion, students should be able to set up and monitor safe indoor and outdoor environments and implement a nutrition education program.

### EDU 185–Cognitive & Lang Act    3 0 3
This course covers methods of developing cognitive and language/communication skills in children. Emphasis is placed on planning the basic components of language and cognitive processes in developing curriculum activities. Upon completion, students should be able to identify, plan, select materials and equipment, and implement and evaluate developmentally appropriate curriculum activities.

### EDU 188–Issues in Early Child Ed    2 0 2
This course covers topics and issues in early childhood education. Emphasis is placed on current advocacy issues, emerging technology, professional growth experiences, and other related topics. Upon completion, students should be able to list, discuss, and explain current topics and issues in early childhood education.

### EDU 221–Children with Sp Needs    3 0 3
This course introduces working with children with special needs. Emphasis is placed on the characteristics and assessment of children and strategies for adapting the home and classroom environment. Upon completion, students should be able to recognize atypical development, make appropriate referrals, and work collaboratively to plan, implement, and evaluate inclusion strategies. Prerequisites: EDU 144 and EDU 145

### EDU 234–Infants, Toddlers, & Twos    3 0 3
This course covers the skills needed to effectively implement group care for infants, toddlers, and two-year olds. Emphasis is placed on child development and developmentally appropriate practices. Upon completion, students should be able to identify, plan, select materials and equipment, and implement and evaluate a developmentally appropriate curriculum.

### EDU 235–School-Age Dev & Program    2 0 2
This course presents developmentally appropriate practices in group care for school-age children. Topics include principles of development, environmental planning, and positive guidance techniques. Upon completion, students should be able to discuss developmental principles for children five to twelve years of age and plan and implement age-appropriate activities.

### EDU 251–Exploration Activities    3 0 3
This course covers discovery experiences in science, math, and social studies. Emphasis is placed on developing concepts for each area and encouraging young children to explore, discover, and construct concepts. Upon completion, students should be able to discuss the discovery approach to teaching, explain major concepts in each area, and plan appropriate experiences for children.

### EDU 259–Curriculum Planning    3 0 3
This course covers early childhood curriculum planning. Topics include philosophy, curriculum,

indoor and outdoor environmental design, scheduling, observation and assessment, and instructional planning and evaluation. Upon completion, students should be able to assess children and curriculum; plan for daily, weekly, and long-range instruction; and design environments with appropriate equipment and supplies. Prerequisites: EDU 112, EDU 113

**EDU 261–Early Childhood Admin I    2 0 2**
This course covers the policies, procedures, and responsibilities for the management of early childhood education programs. Topics include implementation of goals, principles of supervision, budgeting and financial management, and meeting the standards for a NC Child Day Care license. Upon completion, students should be able to develop program goals, explain licensing standards, determine budgeting needs, and describe effective methods of personnel supervision.

**EDU 262–Early Childhood Admin II    3 0 3**
This course provides a foundation for budgetary, financial, and personnel management of the child care center. Topics include budgeting, financial management, marketing, hiring, supervision, and professional development of a child care center. Upon completion, students should be able to formulate marketing, financial management, and fund development plans and develop personnel policies, including supervision and staff development plans. Prerequisites: EDU 261.

**EDU 275–Effective Teach Train    2 0 2**
This course provides specialized training using an experienced-based approach to learning. Topics include instructional preparation and presentation, student interaction, time management, learning expectations, evaluation, and curriculum principles and planning. Upon completion, students should be able to prepare and present a six-step lesson plan and demonstrate ways to improve students' time-on-task.

**EDU 282–Early Childhood Lit    3 0 3**
This course cover the history, selection, and integration of literature and language in the early childhood curriculum. Topics include the history and selection of developmentally appropriate children's literature and the use of books and other media to enhance language and literacy in the classroom. Upon completion, students should be able to select appropriate books for storytelling, reading aloud, puppetry, flannel board use, and other techniques.

**EDU 288–Adv Issues/Early Child Ed    2 0 2**
This course covers advanced topics and issues in early childhood. Emphasis is placed on current advocacy issues, emerging technology, professional growth experiences, and other related topics. Upon completion, students should be able to list, discuss, and explain advanced current topics and issues in early childhood education.

## ENGINEERING

**EGR 285–Design Project    0 4 2**
This course provides the opportunity to design and construct an instructor-approved project using previously acquired skills. Emphasis is placed on selection, proposal, design, construction, testing, and documentation of the approved project. Upon completion, students should be able to present and demonstrate operational projects.

## ELECTRICITY

**ELC 111–Intro to Electricity    2 2 3**
This course introduces the fundamental concepts of electricity and test equipment to non-electrical/electronic majors. Topics include basic DC and AC principles (voltage, resistance, current, impedance); components (resistors, inductors, and capacitors); power; and operation of test equipment. Upon completion, students should be able to construct and analyze simple DC and AC circuits using electrical test equipment.

**ELC 112–DC/AC Electricity    3 6 5**
This course introduces the fundamental concepts of and computations related to DC/AC electricity. Emphasis is placed on DC/AC circuits, components, operation of test equipment; and other related topics. Upon completion, students should be able to construct, verify, and analyze simple DC/AC circuits.

**ELC 113–Basic Wiring I    2 6 4**
This course introduces the care/usage of tools and materials used in electrical installations and the requirements of the National Electrical Code. Topics include NEC, electrical safety, and electrical blueprint reading; planning, layout; and installation of electrical distribution equipment; lighting; overcurrent protection; conductors; branch circuits; and conduits. Upon completion, students should be able to properly install conduits, wiring, and electrical distribution equipment associated with basic electrical installations.

**ELC 114–Basic Wiring II    2 6 4**
This course provides additional instruction in the application of electrical tools, materials, and test equipment associated with electrical installations. Topics include the NEC; safety; electrical blueprints; planning, layout, and installation of equipment and conduits; and wiring devices such as panels and overcurrent devices. Upon completion, students should be able to properly install equipment and conduit associated with electrical installations. Prerequisites: ELC 113

**ELC 115–Industrial Wiring    2 6 4**
This course covers layout, planning, and installation of wiring systems in industrial facilities. Emphasis is placed on industrial wiring

methods and materials. Upon completion, students should be able to install industrial systems and equipment. Prerequisites: ELC 113

**ELC 117–Motors and Controls**     2 6 4
This course introduces the fundamental concepts of motors and motor controls. Topics include ladder diagrams, pilot devices, contractors, motor starters, motors, and other control devices. Upon completion, students should be able to properly select, connect, and troubleshoot motors and control circuits. Prerequisites: ELC 111, 112 or ELC 131

**ELC 118–National Electrical Code**     1 2 2
This course covers the use of the current National Electrical Code. Topics include the NEC history, wiring methods, overcurrent protection, materials, and other related topics. Upon completion, students should be able to effectively use the NEC.

**ELC 119–NEC Calculations**     1 2 2
This course covers branch circuit, feeder, and service calculations. Emphasis is placed on sections of the National Electrical Code related to calculations. Upon completion, students should be able to use appropriate code sections to size wire, conduit, and overcurrent devices for branch circuits, feeders, and service.

**ELC 128–Intro to PLC**     2 3 3
This course introduces the programmable logic controller (PLC) and its associated applications. Topics include ladder logic diagrams, input/output modules, power supplies, surge protection, selection/installation of controllers, and interfacing of controllers with equipment. Upon completion, students should be able to install PLCs and create simple programs.

**ELC 131–DC/AC Circuit Analysis**     4 3 5
This course introduces DC and AC electricity with an emphasis on circuit analysis, measurements, and operation of test equipment. Topics include DC and AC principles, circuit analysis laws and theorems, components, test equipment operation, circuit simulation software, and other related topics. Upon completion, students should be able to interpret circuit schematics; design, construct, verify, and analyze DC/AC circuits; and properly use test equipment. Corequisites: MAT 161

## ELECTRONICS

**ELN 131–Electronic Devices**     3 3 4
This course includes semiconductor-based devices such as diodes, bipolar transistors, FETs, thyristors, and related components . Emphasis is placed on analysis, selection, biasing, and applications in power supplies, small signal amplifiers, and switching and control circuits. Upon completion, students should be able to construct, analyze, verify, and troubleshoot discrete component circuits using appropriate techniques and test equipment. Corequisites: ELC 112 or ELC 131

**ELN 132–Linear IC Applications**     3 3 4
This course introduces the characteristics and applications of linear integrated circuits. Topics include op-amp circuits, differential amplifiers, instrumentation amplifiers, waveform generators, active filters, PLLs, and IC voltage regulators. Upon completion, students should be able to construct, analyze, verify, and troubleshoot linear integrated circuits using appropriate techniques and test equipment. Prerequisites: ELN 131

**ELN 133–Digital Electronics**     3 3 4
This course covers combinational and sequential logic circuits. Topics include number systems, Boolean algebra, logic families, MSI and LSI circuits, AC/DC converters, and other related topics. Upon completion, students should be able to construct, analyze, verify, and troubleshoot digital circuits using appropriate techniques and test equipment.

**ELN 135–Electronic Circuits**     2 3 3
This course covers discrete component amplifiers, power supplies, wave-shaping, oscillators, and special purpose ICs. Topics include feedback, analog arithmetic circuits, current and voltage sources, amplifiers, timers, PLLs, filters, regulators, and other related circuits. Upon completion, students should be able to determine, by the configuration, the function of common analog circuits and troubleshoot circuits based on service information. Prerequisites: ELN 131

**ELN 150–CAD for Electronics**     1 3 2
This course introduces computer-aided drafting (CAD) with an emphasis on applications in the electronics field. Topics include electronics industry standards (symbols, schematic diagrams, layouts); drawing electronic circuit diagrams; and specialized electronic drafting practices and components such as resistors, capacitors, and ICs. Upon completion, students should be able to prepare electronic drawings with CAD software. Prerequisites: CIS 110 or CIS 111

**ELN 229–Industrial Electronics**     2 4 4
This course covers semiconductor devices used in industrial applications. Topics include the basic theory, application, and operating characteristics of semiconductor devices (filters, rectifiers, FET, SCR, Diac, Triac, Op-amps, etc). Upon completion, students should be able to install and/or troubleshoot these devices for proper operation in an industrial electronic circuit. Prerequisites: ELC 112, ELC 131

**ELN 231–Industrial Controls**     2 3 3
This course introduces the fundamental concepts of solid-state control of rotating machinery and associated peripheral devices. Topics include rotating machine theory, ladder logic, electromechanical and solid state relays, motor controls, pilot devices, three-phase power systems, and other related topics. Upon completion,

students should be able to interpret ladder diagrams and demonstrate an understanding of electromechanical and electronic control of rotating machinery. Prerequisites: ELC 112 or ELC 131

**ELN 232–Intro to Microprocessors**    **3 3 4**
This course introduces microprocessor architecture and microcomputer systems including memory and input/output interfacing. Topics include assembly language programming, bus architecture, bus cycle types, I/O systems, memory systems, interrupts, and other related topics. Upon completion, students should be able to interpret, analyze, verify, and troubleshoot fundamental microprocessor circuits and programs using appropriate techniques and test equipment. Prerequisites: ELN 133

**ELN 233–Microprocessor Systems**    **3 3 4**
This course covers the application and design of microprocessor control systems. Topics include control and interfacing of systems using AD/DA, serial/parallel I/O, communication protocols, and other related applications. Upon completion, students should be able to design, construct, program, verify, analyze, and troubleshoot fundamental microprocessor interface and control circuits using related equipment. Prerequisites: ELN 232

## ENGLISH

*Initial student placement in developmental courses is based on individual college placement testing policies and procedures. Students should begin developmental course work at the appropriate level indicated by the college's placement test.*

**ENG 080–Writing Foundations**    **3 2 4**
This course introduces the writing process and stresses effective sentences. Emphasis is placed on applying the conventions of written English, reflecting standard usage and mechanics in structuring a variety of sentences. Upon completion, students should be able to write correct sentences and a unified, coherent paragraph. Prerequisites: Placement. *This course does not satisfy the developmental reading and writing prerequisite for ENG 111.*

**ENG 090–Composition Strategies**    **3 0 3**
This course provides practice in the writing process and stresses effective paragraphs. Emphasis is placed on learning and applying the conventions of standard written English in developing paragraphs within the essay. Upon completion, students should be able to compose a variety of paragraphs and a unified, coherent essay. Prerequisites: ENG 080 or Placement. *This course satisfies the developmental prerequisite for ENG 111.*

**ENG 090A–Comp Strategies Lab**    **0 2 1**
This writing lab is designed to practice the skills introduced in ENG 090. Emphasis is placed on learning and applying the conventions of standard written English in developing paragraphs within the essay. Upon completion, students should be able to compose a variety of paragraphs and a unified, coherent essay. Prerequisites: ENG 080 or Placement. Corequisites: ENG 090

**ENG 101–Applied Communications I**    **3 0 3**
This course is designed to enhance reading and writing skills for the workplace. Emphasis is placed on technical reading, job-related vocabulary, sentence writing, punctuation, and spelling. Upon completion, students should be able to identify main ideas with supporting details and produce mechanically correct short writings appropriate to the workplace. This is a diploma-level course.

**ENG 102–Applied Communications II**    **3 0 3**
This course is designed to enhance writing and speaking skills for the workplace. Emphasis is placed on generating short writings such as job application documents, memoranda, and reports and developing interpersonal communication skills with employees and the public. Upon completion, students should be able to prepare effective, short, and job-related written and oral communications. *This is a diploma-level course.*

**ENG 111–Expository Writing**    **3 0 3**
This course is the required first course in a series of two designed to develop the ability to produce clear expository prose. Emphasis is placed on the writing process including audience analysis, topic selection, thesis support and development, editing, and revision. Upon completion, students should be able to produce unified, coherent, well-developed essays using standard written English. Prerequisites: ENG 090 and RED 090. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in English composition.*

**ENG 112–Argument-Based Research**    **3 0 3**
This course, the second in a series of two, introduces research techniques, documentation styles, and argumentative strategies. Emphasis is placed on analyzing data and incorporating research findings into documented argumentative essays and research projects. Upon completion, students should be able to summarize, paraphrase, interpret, and synthesize information from primary and secondary sources using standard research format and style. Prerequisites: ENG 111. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in English composition.*

**ENG 113–Literature-Based Research**    **3 0 3**
This course, the second in a series of two, expands the concepts developed in ENG 111 by focusing on writing that involves literature-based research and documentation.

Emphasis is placed on critical reading and thinking and the analysis and interpretation of prose, poetry, and drama: plot, characterization, theme, cultural context, etc. Upon completion, students should be able to construct mechanically-sound, documented essays and research papers that analyze and respond to literary works. Prerequisites: ENG 111. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in English composition.*

**ENG 125–Creative Writing I       3 0 3**
This course is designed to provide students with the opportunity to practice the art of creative writing. Emphasis is placed on writing, fiction, poetry, and sketches. Upon completion, students should be able to craft and critique their own writing and critique the writing of others. Prerequisites: ENG 111. Corequisites: ENG 112 or ENG 113

**ENG 126–Creative Writing II       3 0 3**
This course is designed as a workshop approach for advancing imaginative and literary skills. Emphasis is placed on the discussion of style, techniques, and challenges for first publications. Upon completion, students should be able to submit a piece of their writing for publication. Prerequisites: ENG 125

**ENG 131–Introduction to Literature       3 0 3**
This course introduces the principal genres of literature. Emphasis is placed on literary terminology, devices, structure, and interpretation. Upon completion, students should be able to analyze and respond to literature. This course will be offered alternate summers in conjunction with other humanities courses that include travel. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.* Prerequisites: ENG 111. Corequisites: ENG 112 or ENG 113

**ENG 231–American Literature I       3 0 3**
This course covers selected works in American literature from its beginnings to 1865. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. Prerequisites: ENG 112 or ENG 113. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**ENG 232–American Literature II       3 0 3**
This course covers selected works in American literature from 1865 to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to inter-

pret, analyze, and respond to literary works in their historical and cultural contexts. Prerequisites: ENG 112 or ENG 113. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**ENG 233–Major American Writers       3 0 3**
This course provides an intensive study of the works of several major American authors. Emphasis is placed on American history, culture, and the literary merits. Upon completion, students should be able to interpret, analyze, and evaluate the works studied. This course will be offered alternate summers in conjunction with other humanities courses that include travel. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.* Prerequisites: ENG 112 or ENG 113

**ENG 241–British Literature I       3 0 3**
This course covers selected works in British literature from its beginnings to the Romantic Period. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. Prerequisites: ENG 112 or ENG 113. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**ENG 242–British Literature II       3 0 3**
This course covers selected works in British literature from the Romantic Period to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. Prerequisites: ENG 112 or ENG 113. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**ENG 251–Western World Literature I       3 0 3**
This course provides a survey of selected European works from the Classical period through the Renaissance. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to selected works. Prerequisites: ENG 112 or ENG 113. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**ENG 252–Western World Literature II    3 0 3**
This course provides a survey of selected European works from the Neoclassical period to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to selected works. Prerequisites: ENG 112 or ENG 113. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**ENG 261–World Literature I    3 0 3**
This course introduces selected works from the Pacific, Asia, Africa, Europe, and the Americas from their literary beginnings through the seventeenth century. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to selected works. Prerequisites: ENG 112 or ENG 113. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**ENG 262–World Literature II    3 0 3**
This course introduces selected works from the Pacific, Asia, Africa, Europe, and the Americas from the eighteenth century to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to selected works. Prerequisites: ENG 112 or ENG 113. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**ENG 272–Southern Literature    3 0 3**
This course provides an analytical study of the works of several Southern authors. Emphasis is placed on the historical and cultural contexts, themes, aesthetic features of individual works, and biographical backgrounds of the authors. Upon completion, students should be able to interpret, analyze, and discuss selected works. Prerequisites: ENG 112 or ENG 113

## FIRE PROTECTION

**FIP 120–Intro to Fire Protection    2 0 2**
This course provides an overview of the history, development, methods, systems, and regulations as they apply to the fire protection field. Topics include history, evolution, statistics, suppression, organizations, careers, curriculum, and other related topics. Upon completion, students should be able to demonstrate a broad understanding of the fire protection field.

**FIP 124–Fire Prevention & Public Ed    3 0 3**
This course introduces fire prevention concepts as they relate to community and industrial operations. Topics include the development and maintenance of fire prevention programs, educational programs, and inspection programs. Upon completion, students should be able to research, develop, and present a fire safety program to a citizens or industrial group.

**FIP 128–Detection & Investigation    3 0 3**
This course covers procedures for determining the origin and cause of accidental and incendiary fires. Topics include collection and preservation of evidence, detection and determination of accelerants, courtroom procedure and testimony, and documentation of the fire scene. Upon completion, students should be able to conduct a competent fire investigation and present those findings to appropriate officials or equivalent.

**FIP 132–Building Construction    3 0 3**
This course covers the principles and practices related to various types of building construction, including residential and commercial, as impacted by fire conditions. Topics include types of construction and related elements, fire resistive aspects of construction materials, building codes, collapse, and other related topics. Upon completion, students should be able to understand and recognize various types of construction and their positive or negative aspects as related to fire conditions.

**FIP 136–Inspections & Codes    3 0 3**
This course covers the fundamentals of fire and building codes and procedures to conduct an inspection. Topics include review of fire and building codes, writing inspection reports, identifying hazards, plan reviews, site sketches, and other related topics. Upon completion, students should be able to conduct a fire code compliance inspection and produce a written report.

**FIP 140–Industrial Fire Protect    2 0 2**
This course covers fire protection systems in industrial facilities. Topics include applicable health and safety standards, insurance carrier regulations, other regulatory agencies, hazards of local industries, fire brigade operation, and loss prevention programs. Upon completion, students should be able to prepare a procedure to plan, organize, and evaluate an industrial facility's fire protection.

**FIP 144–Sprinklers & Auto Alarms    2 2 3**
This course introduces various types of automatic sprinklers, standpipes, and fire alarm systems. Topics include wet or dry systems, testing and maintenance, water supply requirements, fire detection and alarm systems, and other related topics. Upon completion, students should be able to demonstrate a working knowledge of various sprinkler and alarm systems and required inspection and maintenance.

**FIP 152–Fire Protection Law          2 0 2**
This course covers fire protection law. Topics include torts, legal terms, contracts, liability, review of case histories, and other related topics. Upon completion, students should be able to discuss laws, codes, and ordinances as they relate to fire protection.

**FIP 156–Computers in Fire Svc          1 2 2**
This course covers the use of computers by fire protection organizations. Topics include operating systems, networking concepts, fire incident reporting systems, and other software applications in fire protection. Upon completion, students should be able to demonstrate knowledge of computers and their applications to fire protection.

**FIP 164–OSHA Standards          2 0 2**
This course covers public and private sector OSHA work site requirements. Emphasis is placed on accident prevention and reporting, personal safety, machine operation, and hazardous material handling. Upon completion, students should be able to analyze and interpret specific OSHA regulations and write workplace policies designed to achieve compliance.

**FIP 220–Fire Fighting Strategies          3 0 3**
This course provides preparation for command of initial incident operations involving emergencies within both the public and private sector. Topics include incident management, fire-ground tactics and strategies, incident safety, and command/control of emergency operations. Upon completion, students should be able to describe the initial incident system as it relates to operations involving various emergencies in fire and non-fire situations.

**FIP 230–Chem of Hazardous Mat I          5 0 5**
This course covers the evaluation of hazardous materials. Topics include use of the periodic table, hydrocarbon derivatives, placards and labels, parameters of combustion, and spill and leak mitigation. Upon completion, students should be able to demonstrate knowledge of the chemical behavior of hazardous materials.

**FIP 236–Emergency Management          2 0 2**
This course covers the four phases of emergency management: mitigation, preparedness, response, and recovery. Topics include organizing for emergency management, coordinating for community resources, public sector liability, and the roles of government agencies at all levels. Upon completion, students should be able to demonstrate an understanding of comprehensive emergency management and the integrated emergency management system.

**FIP 256–Munic Public Relations          2 0 2**
This course is a general survey of municipal public relations and their effect on the governmental process. Topics include principles of public relations, press releases, press conferences, public information officers, image surveys, and the effects of perceived service on fire protection delivery. Upon completion, students should be able to manage the public relations functions of a fire service organization.

**FIP 260–Fire Protect Planning          3 0 3**
This course covers the need for a comprehensive approach to fire protection planning. Topics include the planning process, using an advisory committee, establishing goals and objectives, and techniques used to approve and implement a plan. Upon completion, students should be able to demonstrate a working knowledge of the concepts and principles of planning as it relates to fire protection.

**FIP 276–Managing Fire Services          3 0 3**
This course provides an overview of fire department operative services. Topics include finance, staffing, equipment, code enforcement, management information, specialized services, legal issues, planning, and other related topics. Upon completion, students should be able to understand concepts and apply fire department management and operations principles.

## GEOGRAPHY

**GEO 111–World Regional Geography          3 0 3**
This course introduces the regional concept which emphasizes the spatial association of people and their environment. Emphasis is placed on the physical, cultural, and economic systems that interact to produce the distinct regions of the earth. Upon completion, students should be able to describe variations in physical and cultural features of a region and demonstrate an understanding of their functional relationships. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

**GEO 130–General Physical Geography  3 0 3**
This course introduces both the basic physical components that help shape the earth and the study of minerals, rocks, and evolution of landforms. Emphasis is placed on the geographic grid, cartography, weather, climate, mineral composition, fluvial processes, and erosion and deposition. Upon completion, students should be able to identify these components and processes and explain how they interact. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

## GEOLOGY

**GEL 111–Introductory Geology        3 2 4**
This course introduces basic landforms and geological processes. Topics include rocks, minerals, volcanoes, fluvial processes, geological history, plate tectonics, glaciers, and coastal dynamics. Upon completion, students should be able to describe basic geological processes that shape the earth. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

**GEL 120–Physical Geology        3 2 4**
This course provides a study of the structure and composition of the earth's crust. Emphasis is placed on weathering, erosional and depositional processes, mountain building forces, rocks and minerals, and structural changes. Upon completion, students should be able to explain the structure, composition, and formation of the earth's crust. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

## HEALTH

**HEA 110–Personal Health/Wellness        3 0 3**
This course provides an introduction to basic personal health and wellness. Emphasis is placed on current health issues such as nutrition, mental health, and fitness. Upon completion, students should be able to demonstrate an understanding of the factors necessary to the maintenance of health and wellness.

**HEA 111–First Aid & Safety        1 2 2**
This course provides first aid and safety education. Emphasis is placed on safe attitudes, accident prevention, and response to accidents and injuries. Upon completion, students should be able to demonstrate proper first aid and safety skills.

**HEA 120–Community Health        3 0 3**
This course provides information about contemporary community health and school hygiene issues. Topics include health education and current information about health trends. Upon completion, students should be able to recognize and devise strategies to prevent today's community health problems.

## HISTORY

**HIS 111–World Civilizations I        3 0 3**
This course introduces world history from the dawn of civilization to the early modern era. Topics include Eurasian, African, American, and Greco-Roman civilizations and Christian, Islamic and Byzantine cultures. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in pre-modern world civilizations. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

**HIS 112–World Civilizations II        3 0 3**
This course introduces world history from the early modern era to the present. Topics include the cultures of Africa, Europe, India, China, Japan, and the Americas. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in modern world civilizations. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

**HIS 131–American History I        3 0 3**
This course is a survey of American history from pre-history through the Civil War era. Topics include the migrations to the Americas, the colonial and revolutionary periods, the development of the Republic, and the Civil War. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in early American history. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

**HIS 132–American History II        3 0 3**
This course is a survey of American history from the Civil War era to the present. Topics include industrialization, immigration, the Great Depression, the major American wars, the Cold War, and social conflict. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in American history since the Civil War. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

**HIS 228–History of the South        3 0 3**
This course covers the origin and development of the South as a distinct region of the United States. Emphasis is placed on Southern identity and its basis in cultural, social, economic, and political developments during the 19th and 20th centuries. Upon completion, students should be able to identify and analyze the major cultural, social, economic, and political developments in the South. As a portion of this class, we will travel to different areas that are of interest to Southern History.

**HIS 229–History of the Old South        3 0 3**
This course is a study of the development of the South from European settlement through the Civil War. Topics include the multi-ethnic character of colonization, the plantation economy, relations between social classes, the nature of slavery, and issues leading to the

Civil War. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in the antebellum South. As a portion of this class, we will travel to different areas that are of interest to Southern History.

## HEALTH SCIENCES

### HSC 110–Orientation to Health Careers    0 0 0 1
This course is a survey of health care professions. Topics include professional duties and responsibilities, working environments, and career choices. Upon completion, students should be able to demonstrate an understanding of the health care professions and be prepared to make informed career choices.

### HSC 120–CPR    0 2 0 1
This course covers the basic knowledge and skills for the performance of infant, child, and adult CPR and the management of foreign body airway obstruction. Emphasis is placed on recognition, assessment, and proper management of emergency care. Upon completion, students should be able to perform infant, child, and adult CPR and manage foreign body airway obstructions.

## HUMANITIES

### HUM 120–Cultural Studies    3 0 3
This course introduces the distinctive features of a particular culture. Topics include art, history, music, literature, politics, philosophy, and religion. Upon completion, students should be able to appreciate the unique character of the study culture. The culture to be studied is Afro-American culture. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

### HUM 122–Southern Culture    3 0 3
This course explores the major qualities that make the South a distinct region. Topics include music, politics, literature, art, religion, race relations, and the role of social class in historical and contemporary contexts. Upon completion, students should be able to identify the characteristics that distinguish Southern culture. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

### HUM 170–The Holocaust    3 0 3
This course provides a survey of the destruction of European Jewry by the Nazis during World War II. Topics include the anti-Semitic ideology, bureaucratic structures, and varying conditions of European occupation and domination under the Third Reich. Upon completion, students should be able to demonstrate an understanding of the historical, social, religious, political, and economic factors which cumulatively resulted in the Holocaust.

### HUM 211–Humanities I    3 0 3
This course introduces the humanities as a record in literature, music, art, history, religion, and philosophy of humankind's answers to the fundamental questions of existence. Emphasis is placed on the interconnectedness of various aspects of cultures from ancient through early modern times. Upon completion, students should be able to identify significant figures and cultural contributions of the periods studied. Prerequisites: ENG 111. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

## HYDRAULICS

### HYD 110–Hydraulics/Pneumatics I    2 3 3
This course introduces the basic components and functions of hydraulic and pneumatic systems. Topics include standard symbols, pumps, control valves, control assemblies, actuators, FRL, maintenance procedures, and switching and control devices. Upon completion, students should be able to understand the operation of a fluid power system, including design, application, and troubleshooting.

## INDUSTRIAL SCIENCE

### ISC 110–Workplace Safety    1 0 1
This course introduces the basic concepts of workplace safety. Topics include fire, ladders, lifting, lock-out/tag-out, personal protective devices, and other workplace safety issues related to OSHA compliance. Upon completion, students should be able to demonstrate an understanding of the components of a safe workplace.

### ISC 112–Industrial Safety    2 0 2
This course introduces the principles of industrial safety. Emphasis is placed on industrial safety and OSHA and environmental regulations. Upon completion, students should be able to demonstrate knowledge of a safe working environment. Particular emphasis is placed on the management structure and practices required to achieve excellence in safety results.

### ISC 128–Industrial Leadership    2 0 2
This course introduces principles and techniques for managers in modern industry. Topics include leadership traits, management principles and processes, managing conflict, group dynamics, team building, counseling, motivation, and communication. Upon completion, students should be able to understand and apply leadership and management principles in work situations. Emphasis is given to: defining excellence, principles centered leadership, character ethic rather than personality based cultures, and achieving high trust levels essential in high performance organizations.

**ISC 132–Mfg Quality Control**     2 3 3
This course introduces quality concepts and techniques used in industry. Topics include elementary statistics and probability, process control, process capability, and quality improvement tools. Upon completion, students should be able to demonstrate an understanding of the concepts and principles of quality and apply them to the work environment. Emphasis is given to the development and use of control charts and operation involvement in achieving quality excellence.

**ISC 133–Mfg Management Practices**     2 0 2
This course covers successful industrial organizations and management practices for improving quality and productivity. Topics include self-managed work teams, problem-solving skills, and production management techniques. Upon completion, students should be able to demonstrate an understanding of day-to-day plant operations, team management processes, and the principles of group dynamics.

**ISC 135–Principles of Industrial Mgmt**     3 0 3
This course covers the managerial principles and practices required for organizations to succeed in modern industry. Topics include the functions and roles of all levels of management, organization design, and planning and control of manufacturing operations. Upon completion, students should be able to demonstrate an understanding of management principles and integrate these principles into job situations.

**ISC 136–Productivity Analysis I**     2 3 3
This course covers modern methods of improving productivity. Topics include traditional motion economy, methods analysis, time standards, process analysis, cycle time management, and human factors/ergonomics. Upon completion, students should be able to demonstrate an understanding of productivity concepts and apply productivity improvement techniques to work situations.

**ISC 170–Problem-Solving Skills**     3 0 3
This course covers basic concepts of interpersonal and problem-solving skills. Topics include leadership development, constructive feedback, building relationships, and winning support from others. Upon completion, students should be able to use interpersonal skills effectively and lead others.

**ISC 221–Statistical Qual Control**     3 0 3
This course covers the principles and techniques of statistical process control for the improvement of productivity. Emphasis is placed on basic statistics for quality control, organization and procedures for efficient quality control including inspections, process control, and tests of significance. Upon completion, students should be able to apply statistical principles and techniques to enhance production. Prerequisites: Completion of curriculum mathematics requirement

**ISC 233–Industrial Org & Mgmt**     3 0 3
This course covers advanced organization and management philosophies for organization improvement. Emphasis is placed on understanding comprehensive organization improvement concepts such as reengineering, MBQA, ISO 9000, and teams. Upon completion, students should be able to demonstrate an understanding of organizations and assess their strengths and weaknesses. Prerequisites: ISC 133 or ISC 128

**ISC 235–Management Problems**     3 0 3
This course covers problem-solving strategies for a variety of industrial management problems. Emphasis is placed on integrating management principles and practices in an industrial setting through a case-study approach. Upon completion, students should be able to analyze a variety of management problems and provide oral and/or written reports which include problem definition and recommendations.

**ISC 255–Engineering Economy**     2 2 3
This course covers the process of economic evaluation of manufacturing industrial alternatives such as equipment selection, replacement studies, and cost reduction proposals. Topics include discounted cash flows, time value of money, income tax considerations, internal rates of return, and comparison of alternatives using computer programs. Upon completion, students should be able to analyze complex manufacturing alternatives based on engineering economy principles.

## MACHINING

**MAC 111–Machining Technology I**     2 12 6
This course introduces machining operations as they relate to the metalworking industry. Topics include machine shop safety, measuring tools, lathes, drilling machines, saws, milling machines, bench grinders, and layout instruments. Upon completion, students should be able to safely perform the basic operations of measuring, layout, drilling, sawing, turning, and milling.

**MAC 112–Machining Technology II**     2 12 6
This course provides additional instruction and practice in the use of precision measuring tools, lathes, milling machines, and grinders. Emphasis is placed on setup and operation of machine tools including the selection and use of work holding devices, speeds, feeds, cutting tools, and coolants. Upon completion, students should be able to perform basic procedures on precision grinders and advanced operations of measuring, layout, drilling, sawing, turning, and milling. Prerequisites: MAC 111

**MAC 113–Machining Technology III**     2 12 6
This course provides an introduction to advanced and special machining operations. Emphasis is placed on working to specified

tolerances with special and advanced setups. Upon completion, students should be able to produce a part to specifications. Prerequisites: MAC 112

**MAC 121–Intro to CNC**               **2 0 2**
This course introduces the concepts and capabilities of computer numerical control machine tools. Topics include setup, operation, and basic applications. Upon completion, students should be able to explain operator safety, machine protection, data input, program preparation, and program storage.

**MAC 122–CNC Turning**               **1 3 2**
This course introduces the programming, setup, and operation of CNC turning centers. Topics include programming formats, control functions, program editing, part production, and inspection. Upon completion, students should be able to manufacture simple parts using CNC turning centers.

**MAC 124–CNC Milling**               **1 3 2**
This course introduces the manual programming, setup, and operation of CNC machining centers. Topics include programming formats, control functions, program editing, part production, and inspection. Upon completion, students should be able to manufacture simple parts using CNC machining centers.

## MATHEMATICS

*Initial student placement in developmental courses is based on individual college placement testing policies and procedures. Students should begin developmental course work at the appropriate level indicated by that college's placement test.*

**MAT 060–Essential Mathematics**               **3 2 4**
This course is a comprehensive study of mathematical skills which should provide a strong mathematical foundation to pursue further study. Topics include principles and applications of decimals, fractions, percents, ratio and proportion, order of operations, geometry, measurement, and elements of algebra and statistics. Upon completion, students should be able to perform basic computations and solve relevant, multi-step mathematical problems using technology where appropriate. Prerequisites: Placement

**MAT 070–Introductory Algebra**               **3 2 4**
This course establishes a foundation in algebraic concepts and problem solving. Topics include signed numbers, exponents, order of operations, simplifying expressions, solving linear equations and inequalities, graphing, formulas, polynomials, factoring, and elements of geometry. Upon completion, students should be able to apply the above concepts in problem solving using appropriate technology. Prerequisites: MAT 060 or Placement. Corequisites: RED 080

**MAT 080–Intermediate Algebra**               **3 2 4**
This course continues the study of algebraic concepts with emphasis on applications. Topics include factoring; rational expressions; rational exponents; rational, radical, and quadratic equations; systems of equations; inequalities; graphing; functions; variations; complex numbers; and elements of geometry. Upon completion, students should be able to apply the above concepts in problem solving using appropriate technology. Prerequisites: MAT 070 or Placement. Corequisites: RED 080

**MAT 101–Applied Mathematics I**               **2 2 3**
This course is a comprehensive review of arithmetic with basic algebra designed to meet the needs of certificate and diploma programs. Topics include arithmetic and geometric skills used in measurement, ratio and proportion, exponents and roots, applications of percent, linear equations, formulas, and statistics. Upon completion, students should be able to solve practical problems in their specific areas of study. Prerequisites: MAT 060. *This course is intended for certificate and diploma programs.*

**MAT 102–Applied Mathematics II**               **2 2 3**
This course introduces the concepts of right triangle trigonometry and geometry with emphasis on applications to problem solving. Topics include the basic definitions and properties of plane and solid geometry, area and volume, and right triangle trigonometry. Upon completion, students should be able to solve applied problems both independently and collaboratively. Prerequisites: MAT 101. *This course is intended for certificate and diploma programs.*

**MAT 140–Survey of Mathematics**               **3 0 3**
This course provides an introduction in a non-technical setting to selected topics in mathematics. Topics include, but are not limited to, sets, logic, probability, statistics, matrices, mathematical systems, geometry, topology, mathematics of finance, and modeling. Upon completion, students should be able to understand a variety of mathematical applications, think logically, and be able to work collaboratively and independently. Prerequisites: MAT 070. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

**MAT 141–Math I for Teachers/K-9**               **3 0 3**
This course is the first of a two course sequence that develops a deeper understanding and appreciation of the basic concepts of mathematics. Emphasis is placed on sets, logic, number bases, elementary number theory, introductory algebra, measurement including metrics, and problem solving. Upon completion, students should be able to communicate orally and in writing these basic mathematical concepts. Prerequisites: MAT 080

**MAT 142–Math II for Teachers/K-9      3 0 3**
This course is the second of a two course sequence that develops a deeper understanding and appreciation of the basic concepts of mathematics. Emphasis is placed on probability, statistics, functions, introductory geometry, and mathematics of finance. Upon completion, students should be able to communicate orally and in writing these basic mathematical concepts and utilize technology as a mathematical tool. Prerequisites: MAT 141

**MAT 151–Statistics I      3 0 3**
This course provides a project-based approach to the study of basic probability, descriptive and inferential statistics, and decision making. Emphasis is placed on measures of central tendency and dispersion, correlation, regression, discrete and continuous probability distributions, quality control, population parameter estimation, and hypothesis testing. Upon completion, students should be able to describe important characteristics of a set of data and draw inferences about a population from sample data. Prerequisites: MAT 080. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

**MAT 151A–Statistics I Lab      0 2 1**
This course is a laboratory for MAT 151. Emphasis is placed on experiences that enhance the materials presented in class. Upon completion, students should be able to solve problems, apply critical thinking, work in teams, and communicate effectively. Prerequisites: MAT 080. Corequisites: MAT 151

**MAT 161–College Algebra      3 0 3**
This course provides an integrated technological approach to algebraic topics used in problem solving. Emphasis is placed on equations and inequalities; polynomial, rational, exponential and logarithmic functions; and graphing and data analysis/modeling. Upon completion, students should be able to choose an appropriate model to fit a data set and use the model for analysis and prediction. Prerequisites: MAT 080. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

**MAT 162–College Trigonometry      3 0 3**
This course provides an integrated technological approach to trigonometry and its applications. Topics include trigonometric ratios, right triangles, oblique triangles, trigonometric functions, graphing, vectors, and complex numbers. Upon completion, students should be able to apply the above principles of trigonometry to problem solving and communication. Prerequisites: MAT 161. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

**MAT 171–Precalculus Algebra      3 0 3**
This is the first of two courses designed to emphasize topics which are fundamental to the study of calculus. Emphasis is placed on equations and inequalities, functions (linear, polynomial, rational), systems of equations and inequalities, and parametric equations. Upon completion, students should be able to solve practical problems and use appropriate models for analysis and predictions. Prerequisites: MAT 080. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

**MAT 172–Precalculus Trigonometry      3 0 3**
This is the second of two courses designed to emphasize topics which are fundamental to the study of calculus. Emphasis is placed on properties and applications of transcendental functions and their graphs, right and oblique triangle trigonometry, conic sections, and vectors. Upon completion, students should be able to solve practical problems and use appropriate models for analysis and prediction. Prerequisites: MAT 171. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

**MAT 175–Precalculus      4 0 4**
This course provides an intense study of the topics which are fundamental to the study of calculus. Emphasis is placed on functions and their graphs with special attention to polynomial, rational, exponential, logarithmic and trigonometric functions, and analytic trigonometry. Upon completion, students should be able to solve practical problems and use appropriate models for analysis and prediction. Prerequisites: High School Algebra III/Trigonometry. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

**MAT 271–Calculus I      3 2 4**
This course covers in depth the differential calculus portion of a three-course calculus sequence. Topics include limits, continuity, derivatives, and integrals of algebraic and transcendental functions of one variable, with applications. Upon completion, students should be able to apply differentiation and integration techniques to algebraic and transcendental functions. Prerequisites: MAT 172 or MAT 175 *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

**MAT 272–Calculus II      3 2 4**
This course provides a rigorous treatment of integration and is the second calculus course in a three-course sequence. Topics include applications of definite integrals, techniques of integration, indeterminate forms, improper

integrals, infinite series, conic sections, parametric equations, polar coordinates, and differential equations. Upon completion, students should be able to use integration and approximation techniques to solve application problems. Prerequisites: MAT 271. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

**MAT 273–Calculus III**          3 2 4
This course covers the calculus of several variables and is third calculus course in a three-course sequence. Topics include functions of several variables, partial derivatives, multiple integrals, solid analytical geometry, vector-valued functions, and line and surface integrals. Upon completion, students should be able to solve problems involving vectors and functions of several variables. Prerequisites: MAT 272. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

**MAT 285–Differential Equations**          3 0 3
This course provides an introduction to ordinary differential equations with an emphasis on applications. Topics include first-order, linear higher-order, and systems of differential equations; numerical methods; series solutions, eigenvalues and eigenvectors; Laplace transforms; and Fourier series. Upon completion, students should be able to use differential equations to model physical phenomena, solve the equations, and use the solutions to analyze the phenomena. Prerequisites: MAT 272.

## MECHANICAL

**MEC 110–Intro to CAD/CAM**          1 2 2
This course introduces CAD/CAM. Emphasis is placed on transferring part geometry from CAD to CAM for the development of a CNC-ready program. Upon completion, students should be able to use CAD/CAM software to produce a CNC program.

**MEC 111–Machine Processes I**          2 3 3
This course introduces safety, hand tools, machine processes, measuring instruments, and the operation of machine shop equipment. Topics include safety, measuring tools, and the basic setup and operation of lathes, milling machines, drill presses, and saws. Upon completion, students should be able to manufacture a simple part to a specified tolerance.

**MEC 112–Machine Processes II**          2 3 3
This course covers advanced use of milling machines and lathes. Emphasis is placed on safety and compound set up of milling machines and lathes for manufacture of projects with a specified fit. Upon completion, students should be able to demonstrate proper procedures for manufacture of assembled parts. Prerequisites: MEC 111

**MEC 161–Manufacturing Processes I**          3 0 3
This course provides the fundamental principles of processing materials into usable forms for the customer. Emphasis is placed on material forming, removal, and value-added processing provided to the customer by the manufacturers. Upon completion, students should be able to apply principles of traditional and non-traditional processing for metals and non-metals.

**MEC 165–Fabrication Techniques**          1 3 2
This course expands skills in bench work, welding, and machinery. Emphasis is placed on integrating techniques of welding and machine processes. Upon completion, students should be able to design, fabricate, and repair parts and/or modify existing equipment. Prerequisites: WLD 112 and MEC 111

**MEC 172–Intro to Metallurgy**          2 2 3
This course covers the production, properties, testing, classification, microstructure, and heat- testing effects of ferrous and non-ferrous metals. Topics include the iron-carbon phase diagram, ITT diagram, ANSI code, quenching, senescing, and other processes concerning metallurgical transformations. Upon completion, students should be able to understand the iron-carbon phase diagram, ITT diagram, microstructure images, and other phenomena concerning the behavior of metals.

**MEC 210–Materials-Stress Analysis**          1 2 2
This course is a study of the principles and analysis of stress within machines and structural elements. Emphasis is placed on various types of loads including static, impact, varying, and dynamic loads. Upon completion, students should be able to demonstrate proficiency in analyzing stress in mechanical joints, welds, beams, and columns.

## MEDICAL ASSISTING

**MED 121–Medical Terminology I**          3 0 0 3
This course introduces prefixes, suffixes, and word roots used in the language of medicine. Topics include medical vocabulary and the terms that relate to the anatomy, physiology, pathological conditions, and treatment of selected systems. Upon completion, students should be able to pronounce, spell, and define medical terms as related to selected body systems and their pathological disorders.

**MED 122–Medical Terminology II**          3 0 0 3
This course is the second in a series of medical terminology courses. Topics include medical vocabulary and the terms that relate to the anatomy, physiology, pathological conditions, and treatment of selected systems. Upon completion, students should be able to pronounce, spell, and define medical terms as related to selected body systems and their pathological disorders. Prerequisites: MED 121

## MARKETING AND RETAILING

**MKT 120–Principles of Marketing    3 0 3**
This course introduces principles and problems of marketing goods and services. Topics include promotion, placement, and pricing strategies for products. Upon completion, students should be able to apply marketing principles in organizational decision making.

**MKT 122–Visual Merchandising    3 0 3**
This course introduces basic layout design and commercial display in retail and service organizations. Topics include an analysis of display as a visual merchandising medium and an examination of the principles and applications of display and design. Upon completion, students should be able to plan, build, and evaluate designs and displays. *This course is a unique concentration requirement of the Marketing and Retailing concentration in the Business Administration program.*

**MKT 123–Fundamentals of Selling    3 0 3**
This course is designed to emphasize the necessity of selling skills in a modern business environment. Emphasis is placed on sales techniques involved in various types of selling situations. Upon completion, students should be able to demonstrate an understanding of the techniques covered.

**MKT 125–Buying and Merchandising    3 0 3**
This course includes an analysis of the organization for buying-what, when and how to buy-and the principles of effective inventory and stock control. Topics include organization for buying, analysis of buyers' responsibilities, pricing, inventory control, planning, cost effectiveness, and vendor relationships. Upon completion, students should be able to demonstrate an understanding of the concepts covered through application.

**MKT 220–Adv. and Sales Promotion    3 0 3**
This course covers the elements of advertising and sales promotion in the business environment. Topics include advertising and sales promotion appeals, selection of media, use of advertising and sales promotion as a marketing tool, and means of testing effectiveness. Upon completion, students should be able to demonstrate an understanding of the concepts covered through application.

**MKT 225–Marketing Research    3 0 3**
This course provides information for decision making by providing guidance in developing, analyzing, and using data. Emphasis is placed on marketing research as a tool in decision making. Upon completion, students should be able to design and conduct a marketing research project and interpret the results. Prerequisites: MKT 120. *This course is a unique concentration requirement of the Marketing and Retailing concentration in the Business Administration program.*

**MKT 226–Retail Applications    3 0 3**
This course is designed to develop occupational competence through participation in case studies, group work, and simulations. Emphasis is placed on all aspects of store ownership and operation, including securing financial backing and a sufficient market share. Upon completion, students should be able to demonstrate an understanding of concepts covered through application. *This course is a unique concentration requirement of the Marketing and Retailing concentration in the Business Administration program.*

**MKT 227–Marketing Applications    3 0 3**
This course extends the study of diverse marketing strategies. Emphasis is placed on case studies and small-group projects involving research or planning. Upon completion, students should be able to effectively participate in the formulation of a marketing strategy. This course is a unique concentration requirement of the Marketing and Retailing concentration in the Business Administration program.

## MAINTENANCE

**MNT 110–Intro to Maint Procedures    1 3 2**
This course covers basic maintenance fundamentals for power transmission equipment. Topics include equipment inspection, lubrication, alignment, and other scheduled maintenance procedures. Upon completion, students should be able to demonstrate knowledge of accepted maintenance procedures and practices according to current industry standards.

**MNT 150–Basic Building Maintenance 1 3 2**
This course introduces the basic skills of building maintenance. Topics include basic carpentry and masonry skills including forming, framing, laying block to a line, repairing, and other related topics. Upon completion, students should be able to perform basic carpentry and masonry skills in a maintenance setting.

## MUSIC

**MUS 110–Music Appreciation    3 0 3**
This course is a basic survey of the music of the Western world. Emphasis is placed on the elements of music, terminology, composers, form, and style within a historical perspective. Upon completion, students should be able to demonstrate skills in basic listening and understanding of the art of music. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

## NETWORKING TECHNOLOGY

**NET 110–Data Comm/Networking    2 2 3**
This course introduce data communication and networking. Topics include telecommunication standards, protocols, equipment, network topologies, communication software,

LANs, WANs, the Internet, and network operating systems. Upon completion, students should be able to demonstrate understanding of the fundamentals of telecommunication and networking. Corequisites: CIS 130

**NET 120–Network Install/Admin I**    2 2 3
This course covers the installation and administration of network hardware and system software. Topics include network topologies, various network operating systems, server and workstation installation and configuration, printer services, and connectivity options. Upon completion, students should be able to perform basic installation and administration of departmental networks. Prerequisites: NET 110 and CIS 215

**NET 220–Network Install/Admin II**    2 2 3
This course covers advanced network installation and administration concepts and procedures. Topics include basic network troubleshooting techniques, advanced print services, traffic management, security, backup, multiple protocol support, server configuration options, fault tolerance, and inter-network options. Upon completion, students should be able to demonstrate understanding of advanced management of departmental networks. Prerequisites: NET 120 and ELC 111

**NET 230–Wide Area Networking**    2 2 3
This course is designed to introduce significant aspects of network interconnectivity. Topics include LAN-to-LAN, LAN-to-host, LAN-to-WAN connectivity, Internet connections, and voice-video-data transmission. Upon completion, students should be able to demonstrate an understanding of wide area networking. Prerequisites: NET 120, 220 and ELC 111

**NET 240–Network Design**    3 0 3
This course covers the principles of the design of LANs and WANs. Topics include network architecture, transmission systems, traffic management, bandwidth requirements, Internet working devices, redundancy, and broad-band versus base-band systems. Upon completion, students should be able to design a network to meet specified business and technical requirements. Prerequisites: NET 120 and ELC 111

**NET 250–Advanced Networks I**    2 2 3
This course covers advanced network management, security, and server issues. Topics include server types (file, database, fax, communication, FTP, e-mail, CD-ROM), encryption, authentication, remote monitoring, viruses, and disaster recovery. Upon completion, students should be able to perform advanced monitoring and management of various types of servers and networks. Prerequisites: CIS 245

**NET 251–Advanced Networks II**    2 2 3
This course is a continuation of NET 250. Topics include further discussion of network management, monitoring and security, as well as additional work with various types of

servers. Upon completion, students should be able to detect and resolve problems relating to network security, performance, and recovery on various types of servers. Prerequisites: NET 250

**NET 260–Internet Dev & Support**    3 0 3
This course covers issues relating to the development and implementation of Internet related tools and services. Topics include Internet organization, site registration, e-mail servers, Web servers, Web page development, legal issues, firewalls, multimedia, TCP/IP, service providers, FTP, list servers, and gateways. Upon completion, students should be able to develop and support the Internet services needed within an organization. Prerequisites: NET 110 and NET 120

**NET 280–Networking Project**    1 4 3
This course provides an opportunity to complete a significant networking project from the design phase through implementation with minimal instructor support. Emphasis is placed on project definition, documentation, installation, testing, presentation, and training. Upon completion, students should be able to complete a project from the definition phase through implementation. Prerequisites: NET 240 and completion of 30 hours in the Networking Technology program

## NURSING

**NUR 101–Practical Nursing I**    7 6 6 11
This course introduces concepts as related to the practical nurse's caregiver and discipline-specific roles. Emphasis is placed on the nursing process, legal/ethical/professional issues, wellness/illness patterns, and basic nursing skills. Upon completion, students should be able to demonstrate beginning understanding of nursing process to promote/maintain/restore optimum health for diverse clients throughout the life span. Prerequisites: Enrollment in the Practical Nursing program. *This is a diploma-level course.*

**NUR 102–Practical Nursing II**    8 0 12 12
This course includes more advanced concepts as related to the practical nurse's caregiver and discipline-specific roles. Emphasis is placed on the nursing process, delegation, cost effectiveness, legal/ethical/professional issues, and wellness/illness patterns. Upon completion, students should be able to begin participating in the nursing process to promote/maintain/restore optimum health for diverse clients throughout the life span. *This is a diploma-level course.* Prerequisites: NUR 101.

**NUR 103–Practical Nursing III**    6 0 12 10
This course focuses on use of nursing/related concepts by practical nurses as providers of care/members of discipline in collaboration with health team members. Emphasis is placed on the nursing process, wellness/illness patterns, entry-level issues, accountability,

advocacy, professional development, evolving technology, and changing health care delivery systems. Upon completion, students should be able to use the nursing process to promote/maintain/restore optimum health for diverse clients throughout the life span. *This is a diploma-level course.* Prerequisites: NUR 102

**NUR 115–Fundamentals of Nursing    2 3 6 5**
This course introduces concepts basic to beginning nursing practice. Emphasis is placed on the application of the nursing process to provide and manage care as a member of the discipline of nursing. Upon completion, students should be able to demonstrate beginning competence in caring for individuals with common alterations of health. Prerequisites: Admission to the Associate Degree Nursing program. Corequisite: NUR 117, BIO 155, PSY 150, ACA 111

**NUR 117–Pharmacology    1 3 0 2**
This course introduces information concerning sources, effects, legalities, and the safe use of medications as therapeutic agents. Emphasis is placed on nursing responsibility, accountability, and application of the nursing process regarding drug therapy. Upon completion, students should be able to compute dosages and administer medication safely. Students must pass a mathematics and calculation competency examination to successfully pass the course. Prerequisites: Admission to program. Corequisites: NUR 115, ACA 111

**NUR 125–Maternal-Child Nursing    5 3 6 8**
This course introduces nursing concepts related to the delivery of nursing care for the expanding family. Emphasis is placed on utilizing the nursing process as a framework for managing/providing nursing care to individuals and families along the wellness-illness continuum. Upon completion, students should be able to utilize the nursing process to deliver nursing care to mothers, infants, children, and families. Prerequisites: NUR 115, NUR 185 Corequisites: NUR 233

**NUR 133–Nursing Assessment    2 3 0 3**
This course provides theory and application experience for performing nursing assessment of individuals across the life span. Emphasis is placed on interviewing and physical assessment techniques and documentation of findings appropriate for nursing. Upon completion, students should be able to perform a health history and perform a noninvasive physical assessment. Prerequisites: NUR 115, NUR 117, BIO 155, BIO 165, PSY 150 Corequisites: NUR 135, PSY 150

**NUR 135–Adult Nursing I    5 3 9 9**
This course introduces concepts related to the nursing care of individuals experiencing acute and chronic alterations in health. Emphasis is placed on utilizing the nursing process as a framework for providing and managing nursing care to individuals along the wellness-illness continuum. Upon completion, students should be able to apply the nursing process to individ-

uals experiencing acute and chronic alterations in health. Community and acute episodic settings will be utilized for applying the associate degree nursing roles. Prerequisites: NUR 115, NUR 117, BIO 155, BIO 165, PSY 150 Corequisites: BIO 166, NUR 133

**NUR 185–Mental Health Nursing    3 0 6 5**
This course includes concepts related to the nursing care of individuals experiencing alterations in social and psychological functioning. Emphasis is placed on utilizing the nursing process to provide and manage nursing care for individuals with common psychiatric disorders or mental health needs. Upon completion, students should be able to apply psychosocial theories in the nursing care of individuals with psychiatric/mental health needs. Prerequisites: NUR 115, NUR 133, NUR 135 Corequisites: PSY 241, BIO 175, ENG 111

**NUR 189–Nursing Transition    1 3 0 2**
This course is designed to assist the licensed practical nurse in transition to the role of the associate degree nurse. Topics include the role of the registered nurse, nursing process, homeostasis, and validation of selected nursing skills and physical assessment. Upon completion, students should be able to articulate into the ADN program at the level of the generic student. Prerequisites: Enrollment in Nursing Transition program and current North Carolina LPN license

**NUR 191–Selected Topics in
          Pharmacology    0 3 0 1**
This course introduces information concerning the safe use of medications as therapeutic agents. Emphasis is placed on nursing responsibility, accountability, and application of the nursing process regarding drug therapy. Upon completion, students should be able to compute dosages and administer medication safely.

**NUR 233–Leadership in Nursing    2 0 0 2**
This course is designed to enhance nursing leadership and management skills in a variety of health care settings. Emphasis is placed on leadership styles, supervision, delegation, leadership and management theories, conflict resolution, change, and time management. Upon completion, students should be able to apply leadership and management skills in a variety of health care settings. Prerequisites: NUR 135, NUR 185 Corequisites: NUR 125

**NUR 235–Adult Nursing II    4 3 15 10**
This course provides expanded concepts related to nursing care for individuals experiencing common complex alterations in health. Emphasis is placed on the nurse's role as a member of a multidisciplinary team and as a manager of care for a group of individuals. Upon completion, students should be able to provide comprehensive nursing care for groups of individuals with common complex

alterations in health. Acute care and long term care settings will be utilized for practicums in complex care and leadership experiences. Prerequisites: NUR 125, NUR 135, NUR 233 Corequisites: NUR 244

**NUR 244–Issues and Trends    2 0 0 2**
This course presents an overview of current trends and issues in nursing as they affect nursing practice in a changing health care environment. Emphasis is placed on making an effective transition into the roles of the practicing nurse. Upon completion, students should be able to articulate professional aspects of the practice of nursing. Prerequisites: NUR 125, NUR 233 Corequisites: NUR 235

## OPERATIONS MANAGEMENT

**OMT 150–Op Mgt Behavioral Sci    3 0 3**
This course introduces social and behavioral science theories as they relate to operational management. Emphasis is placed on the studies and conclusions of McGregor, Maslow, Herzburg, Likert, Aggyris, and Blake. Upon completion, students should be able to recognize and place emphasis on behavioral science in developing and creating an environment that promotes quality. Emphasis is given to learning those factors of motivation that work in the "real world" of manufacturing and how to use these skills.

**OMT 155–Meeting & Present Skills    3 0 3**
This course is designed to develop skills for facilitating successful meetings by enhancing employee involvement and initiative. Topics include planning meetings that promote results, encouraging diverse points of view, handling disruptive behavior, encouraging participation, and taking action when required. Upon completion, students should be able to plan and participate in meetings that accomplish positive results.

## OFFICE SYSTEMS TECHNOLOGY

**OST 122–Office Computations    1 2 2**
This course introduces the keypad and the touch method using the electronic calculator. Topics include mathematical functions in business applications. Upon completion, students should be able to use the electronic calculator to solve a wide variety of problems commonly encountered in business.

**OST 130–Basic Keyboarding    1 2 2**
This course covers basic keyboarding and formatting. Emphasis is placed on correct techniques, mastery of the keyboard, and simple business correspondence. Upon completion, students should be able to key business correspondence.

**OST 131–Keyboarding    1 2 2**
This course covers basic keyboarding skills. Emphasis is placed on the touch system, correct techniques, and development of speed

and accuracy. Upon completion, students should be able to key at an acceptable speed and accuracy level using the touch system. The student should also be able to key business correspondence and reports.

**OST 134–Text Entry & Formatting    3 2 4**
This course is designed to provide the skills needed to increase speed, improve accuracy, and format documents. Topics include letters, memos, tables, and business reports. Upon completion, students should be able to produce mailable documents.

**OST 135–Adv Text Entry & Format    3 2 4**
This course is designed to incorporate computer application skills in the generation of office documents. Emphasis is placed on the production of letters, manuscripts, business forms, tabulation, legal documents, and newsletters. Upon completion, students should be able to make independent decisions regarding planning, style, and method of presentation. Prerequisites: OST 134

**OST 136–Word Processing    1 2 2**
This course introduces word processing concepts and applications. Topics include preparation of a variety of documents and mastery of specialized software functions. Upon completion, students should be able to work effectively in a computerized word processing environment. Prerequisites: OST 131

**OST 137–Office Software App.    1 2 2**
This course introduces the concepts and functions of software that meets the changing needs of the community. Emphasis is placed on the terminology and use of software through a hands on approach. Upon completion, students should be able to use software in a business environment.

**OST 148–Med Coding Billing & Insu    3 0 3**
This course introduces CPT and ICD coding as they apply to medical insurance and billing. Emphasis is placed on accuracy in coding, forms preparation, and posting. Upon completion, students should be able to describe the steps of the total billing cycle and explain the importance of accuracy. *This course is a unique concentration requirement in the Medical Office Systems Technology concentration in the Office Systems Technology program.*

**OST 149–Med Legal Issues    2 0 2**
This course introduces the complex legal, moral, and ethical issues involved in providing health-care services. Emphasis is placed on the legal requirements of medical practices; the relationship of physician, patient, and office personnel; professional liabilities; and medical practice liability. Upon completion, students should be able to demonstrate a working knowledge of current medical law and accepted ethical behavior. *This course is a unique concentration requirement in the Medical Office Systems Technology concentration in the Office Systems Technology program.*

**OST 164–Text Editing Applications    3 0 3**
This course provides a comprehensive study of editing skills needed in the workplace. Emphasis is placed on grammar, punctuation, sentence structure, proofreading, and editing. Upon completion, students should be able to use reference materials to compose and edit text.

**OST 181–Intro to Office Systems    3 0 3**
This course introduces the skills and abilities needed in today's office. Topics include effectively interacting with co-workers and the public, processing simple financial and informational documents, and performing functions typical of today's offices. Upon completion, students should be able to display skills and decision-making abilities essential for functioning in the total office context.

**OST 184–Records Management    1 2 2**
This course includes the creation, maintenance, protection, security, and disposition of records stored in a variety of media forms. Topics include alphabetic, geographic, subject, and numeric filing methods. Upon completion, students should be able to set up and maintain a records management system.

**OST 223–Machine Transcription I    1 2 2**
This course covers the use of transcribing machines to produce mailable documents. Emphasis is placed on appropriate formatting, advanced text editing skills, and transcription techniques. Upon completion, students should be able to transcribe documents into mailable copy. Prerequisites: OST 134, OST 136, and OST 164

**OST 224–Machine Transcription II    1 2 2**
This course provides advanced transcription skills. Emphasis is placed on specialized transcription features. Upon completion, students should be able to transcribe complex business documents into mailable copy with minimal assistance. Prerequisites: OST 223

**OST 233–Office Publications Design    2 2 3**
This course provides entry-level skills in using software with desktop publishing capabilities. Topics include principles of page layout, desktop publishing terminology and applications, and legal and ethical considerations of software use. Upon completion, students should be able to design and produce professional business documents and publications. Prerequisites: OST 136

**OST 236–Adv Word/Information Proc    2 2 3**
This course develops proficiency in the utilization of advanced word/information processing functions. Topics include tables, graphics, macros, sorting, document assembly, merging, and newspaper and brochure columns. Upon completion, students should be able to produce a variety of complex business documents. Prerequisites: OST 136

**OST 241–Med Ofc Transcription I    1 2 2**
This course introduces machine transcription techniques as applied to medical documents. Emphasis is placed on accurate transcription, proofreading, and use of reference materials as well as vocabulary building. Upon completion, students should be able to prepare accurate and usable transcripts of voice recordings in the covered specialties. Prerequisites: MED 121, 122 and OST 135. *This course is a unique concentration requirement in the Medical Office Systems Technology concentration in the Office Systems Technology program.*

**OST 242–Med Ofc Transcription II    1 2 2**
This course continues building machine transcription techniques as applied to medical documents. Emphasis is placed on accurate transcription, proofreading, and use of reference materials as well as continued proofreading/editing skills and vocabulary building. Upon completion, students should be able to perform competently in preparing accurate and usable transcripts of voice recordings in the covered specialties. Prerequisites: OST 241. *This course is a unique concentration requirement in the Medical Office Systems Technology concentration in the Office Systems Technology program.*

**OST 243–Med Office Simulation    2 2 3**
This course introduces medical systems used to process information in the automated office. Topics include traditional and electronic information resources, storing and retrieving information, and the billing cycle. Upon completion, students should be able to use the computer accurately to schedule, bill, update, and make corrections. Prerequisites: OST 131, OST 148 and OST 135. *This course is a unique concentration requirement in the Medical Office Systems Technology concentration in the Office Systems Technology program.*

**OST 286–Professional Development    2 0 2**
This course covers the personal competencies and qualities needed to project a professional image in the office. Topics include interpersonal skills, health lifestyles, appearance, attitude, personal and professional growth, multicultural awareness, and professional etiquette. Upon completion, students should be able to demonstrate these attributes in the classroom, office, and society.

**OST 289–Office Systems Management    2 2 3**
This course provides a capstone course for the office professional. Topics include administrative office procedures, imaging, communication techniques, ergonomics, and equipment utilization. Upon completion, students should be able to function proficiently in a changing office environment. Prerequisites: OST 134, OST 136, and OST 164

## PHLEBOTOMY

**PBT 100–Phlebotomy Technology    5 2 0 6**
This course provides instruction in the skills needed for the proper collection of blood and other specimens used for diagnostic testing. Emphasis is placed on ethics, legalities, medical terminology, safety and universal precautions, health care delivery systems, patient relations, anatomy and physiology, and specimen collection. Upon completion, students should be able to demonstrate competence in the theoretical comprehension of phlebotomy techniques. Prerequisites: Enrollment in the Phlebotomy Technology program. *This is a certificate-level course.*

**PBT 101–Phlebotomy Practicum    0 0 9 3**
This course provides supervised experience in the performance of venipuncture and microcollection techniques in a clinical facility. Emphasis is placed on patient interaction and application of universal precautions, proper collection techniques, special procedures, specimen handling, and data management. Upon completion, students should be able to safely perform procedures necessary for specimen collections on patients in various health care settings. Prerequisites: PBT 100. *This is a certificate-level course.*

## PHYSICAL EDUCATION

**PED 110–Fit and Well for Life    1 2 2**
This course is designed to investigate and apply the basic concepts and principles of lifetime physical fitness and other health-related factors. Emphasis is placed on wellness through the study of nutrition, weight control, stress management, and consumer facts on exercise and fitness. Upon completion, students should be able to plan a personal, lifelong fitness program based on individual needs, abilities, and interests.

**PED 111–Physical Fitness I    0 3 1**
This course provides an individualized approach to physical fitness utilizing the five major components. Emphasis is placed on the scientific basis for setting up and engaging in personalized physical fitness programs. Upon completion, students should be able to set up and implement an individualized physical fitness program.

**PED 112–Physical Fitness II    0 3 1**
This course is an intermediate-level fitness class. Topics include specific exercises contributing to fitness and the role exercise plays in developing body systems. Upon completion, students should be able to implement and evaluate an individualized physical fitness program. Prerequisites: PED 111

**PED 113–Aerobics I    0 3 1**
This course introduces a program of cardiovascular fitness involving continuous, rhythmic exercise. Emphasis is placed on developing cardiovascular efficiency, strength, and flexibil-ity and on safety precautions. Upon completion, students should be able to select and implement a rhythmic aerobic exercise program.

**PED 114–Aerobics II    0 3 1**
This course provides a continuation of a program of cardiovascular fitness involving rhythmic exercise. Emphasis is placed on a wide variety of aerobic activities which include cardiovascular efficiency, strength, and flexibility. Upon completion, students should be able to participate in and design a rhythmic aerobic exercise routine. Prerequisites: PED 113

**PED 115–Step Aerobics I    0 3 1**
This course introduces the fundamentals of step aerobics. Emphasis is placed on basic stepping up and down on an adjustable platform; cardiovascular fitness; and upper body, floor, and abdominal exercises. Upon completion, students should be able to participate in basic step aerobics.

**PED 116–Step Aerobics II    0 3 1**
This course provides a continuation of step aerobics. Emphasis is placed on a wide variety of choreographed step patterns; cardiovascular fitness; and upper body, abdominal, and floor exercises. Upon completion, students should be able to participate in and design a step aerobics routine. Prerequisites: PED 115

**PED 117–Weight Training I    0 3 1**
This course introduces the basics of weight training. Emphasis is placed on developing muscular strength, muscular endurance, and muscle tone. Upon completion, students should be able to establish and implement a personal weight training program.

**PED 118–Weight Training II    0 3 1**
This course covers advanced levels of weight training. Emphasis is placed on meeting individual training goals and addressing weight training needs and interests. Upon completion, students should be able to establish and implement an individualized advanced weight training program. Prerequisites: PED 117

**PED 119–Circuit Training    0 3 1**
This course covers the skills necessary to participate in a developmental fitness program. Emphasis is placed on the circuit training method which involves a series of conditioning timed stations arranged for maximum benefit and variety. Upon completion, students should be able to understand and appreciate the role of circuit training as a means to develop fitness.

**PED 125–Self-Defense-Beginning    0 2 1**
This course is designed to aid students in developing rudimentary skills in self-defense. Emphasis is placed on stances, blocks, punches, and kicks as well as non-physical means of self-defense. Upon completion, students should be able to demonstrate basic self-defense techniques of a physical and non-physical nature.

**PED 126–Self-Defense-Intermediate      0 2 1**
This course is designed to aid students in building on the techniques and skills developed in PED 125. Emphasis is placed on the appropriate psychological and physiological responses to various encounters. Upon completion, students should be able to demonstrate intermediate skills in self-defense stances, blocks, punches, and kick combinations. Prerequisites: PED 125

**PED 128–Golf-Beginning      0 2 1**
This course emphasizes the fundamentals of golf. Topics include the proper grips, stance, alignment, swings for the short and long game, putting, and the rules and etiquette of golf. Upon completion, students should be able to perform the basic golf shots and demonstrate a knowledge of the rules and etiquette of golf.

**PED 129–Golf-Intermediate      0 2 1**
This course covers the more advanced phases of golf. Emphasis is placed on refining the fundamental skills and learning more advanced phases of the games such as club selection, trouble shots, and course management. Upon completion, students should be able demonstrate the knowledge and ability to play a recreational round of golf. Prerequisites: PED 128

**PED 130–Tennis-Beginning      0 2 1**
This course emphasizes the fundamentals of tennis. Topics include basic strokes, rules, etiquette, and court play. Upon completion, students should be able to play recreational tennis.

**PED 131–Tennis-Intermediate      0 2 1**
This course emphasizes the refinement of playing skills. Topics include continuing the development of fundamentals, learning advanced serves, and strokes and pace and strategies in singles and doubles play. Upon completion, students should be able to play competitive tennis. Prerequisites: PED 130

**PED 141–Tumbling and Gymnastics      0 2 1**
This course introduces basic tumbling and gymnastic techniques. Topics include the safe use of gymnastic apparatus such as uneven bars, parallel bars, pommel horse, and balance beam. Upon completion, students should be able to demonstrate skills on selected pieces of apparatus.

**PED 142–Lifetime Sports      0 2 1**
This course is designed to give an overview of a variety of sports activities. Emphasis is placed on the skills and rules necessary to participate in a variety of lifetime sports. Upon completion, students should be able to demonstrate an awareness of the importance of participating in lifetime sports activities.

**PED 143–Volleyball-Beginning      0 2 1**
This course covers the fundamentals of volleyball. Emphasis is placed on the basics of serving, passing, setting, spiking, blocking, and the rules and etiquette of volleyball. Upon completion, students should be able to participate in recreational volleyball.

**PED 144–Volleyball-Intermediate      0 2 1**
This course covers more advanced volleyball techniques. Emphasis is placed on refining skills and developing more advanced strategies and techniques. Upon completion, students should be able to participate in competitive volleyball. Prerequisites: PED 143

**PED 145–Basketball-Beginning      0 2 1**
This course covers the fundamentals of basketball. Emphasis is placed on skill development, knowledge of the rules, and basic game strategy. Upon completion, students should be able to participate in recreational basketball.

**PED 146–Basketball-Intermediate      0 2 1**
This course covers more advanced basketball techniques. Emphasis is placed on refining skills and developing more advanced strategies and techniques. Upon completion, students should be able to play basketball at a competitive level. Prerequisites: PED 145

**PED 147–Soccer      0 2 1**
This course introduces the basics of soccer. Emphasis is placed on rules, strategies, and fundamental skills. Upon completion, students should be able to participate in recreational soccer.

**PED 148–Softball      0 2 1**
This course introduces the fundamental skills and rules of softball. Emphasis is placed on proper techniques and strategies for playing softball. Upon completion, students should be able to participate in recreational softball.

**PED 150–Baseball/Beginning      0 3 1**
This course covers the fundamentals of baseball. Emphasis is placed on skill development, knowledge of the rules, and basic game strategy. Upon completion, students should be able to participate in recreational baseball.

**PED 151–Baseball/Intermediate      0 3 1**
This course covers more advanced baseball techniques. Emphasis is placed on refining skills and developing more advanced strategies and techniques. Upon completion, students should be able to play baseball at a competitive level. Prerequisites: PED 151

**PED 170–Backpacking      0 2 1**
This course covers the proper techniques for establishing a campsite, navigating in the wilderness, and planning for an overnight trip. Topics include planning for meals, proper use of maps and compass, and packing and dressing for extended periods in the outdoors. Upon completion, students should be able to identify quality backpacking equipment, identify the principles of no-trace camping, and successfully complete a backpacking experience.

**PED 171–Nature Hiking**     0 2 1
This course provides instruction on how to equip and care for oneself on the trail. Topics include clothing, hygiene, trail ethics, and necessary equipment. Upon completion, students should be able to successfully participate in nature trail hikes.

**PED 172–Outdoor Living**     1 2 2
This course is designed to acquaint the beginning camper with outdoor skills. Topics include camping techniques such as cooking and preserving food, safety, and setting up camp. Upon completion, students should be able to set up camp sites in field experiences using proper procedures.

**PED 173–Rock Climbing**     0 2 1
This course teaches the fundamental skills and safety of rock climbing. Topics include rock climbing, bouldering, rappelling, the correct method of belaying for climbing and rappelling, and knowledge of equipment. Upon completion, students should be able to demonstrate strong and skillful techniques in climbing and rappelling.

**PED 174–Wilderness Pursuits**     0 2 1
This course covers the skills necessary to prepare for and participate in a wilderness trip. Emphasis is placed on planning, preparing, and participating in a wilderness pack trip. Upon completion, students should be able to safely participate in overnight wilderness pack trips.

**PED 240–Advanced PE Skills**     0 2 1
This course provides those who have mastered skills in a particular physical education area the opportunity to assist with instruction. Emphasis is placed on methods of instruction, class organization, and progressive skill development. Upon completion, students should be able to design, develop, and implement a unit lesson plan for a skill they have mastered. Prerequisite: Demonstrated advanced skills in the specific area of physical education.

**PED 250–Officiating/Bkball/Vball**     1 2 2
This course introduces the rules and techniques for sports officiating in basketball and volleyball. Emphasis is placed on officiating fundamentals and responsibilities. Upon completion, students should be able to demonstrate proper mechanics and knowledge of officiating procedures in basketball and volleyball.

**PED 251–Officiating/Ftball/Soccer**     1 2 2
This course introduces the rules and techniques for sports officiating in football and soccer. Emphasis is placed on officiating fundamentals and responsibilities. Upon completion, students should be able to demonstrate proper mechanics and knowledge of officiating procedures in football and soccer.

**PED 252–Officiating/Bsball/Sfball**     1 2 2
This course introduces the rules and techniques for sports officiating in baseball and softball. Emphasis is placed on officiating fundamentals and responsibilities. Upon completion, students should be able to demonstrate proper mechanics and knowledge of officiating procedures in baseball and softball.

**PED 254–Coaching Basketball**     1 2 2
This course introduces the theory and methods of coaching basketball. Emphasis is placed on rules, game strategies, and selected techniques of coaching basketball. Upon completion, students should be able to demonstrate competent coaching skills in basketball.

**PED 255–Coaching Football**     1 2 2
This course introduces the theory and methods of coaching football. Emphasis is placed on rules, game strategies, and selected techniques of coaching football. Upon completion, students should be able to demonstrate competent coaching skills in football.

**PED 256–Coaching Baseball**     1 2 2
This course introduces the theory and methods of coaching baseball. Emphasis is placed on rules, game strategies, and selected techniques of coaching baseball. Upon completion, students should be able to demonstrate competent coaching skills in baseball.

## PHILOSOPHY

**PHI 210–History of Philosophy**     3 0 3
This course introduces fundamental philosophical issues through an historical perspective. Emphasis is placed on such figures as Plato, Aristotle, Lao-Tzu, Confucius, Augustine, Aquinas, Descartes, Locke, Kant, Wollstonecraft, Nietzsche, and Sartre. Upon completion, students should be able to identify and distinguish among the key positions of the philosophers studied. Prerequisites: ENG 111. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**PHI 240–Introduction to Ethics**     3 0 3
This course introduces theories about the nature and foundations of moral judgments and applications to contemporary moral issues. Emphasis is placed on utilitarianism, rule-based ethics, existentialism, relativism versus objectivism, and egoism. Upon completion, students should be able to apply various ethical theories to individual moral issues such as euthanasia, abortion, crime and punishment, and justice. Prerequisites: ENG 111. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

## PHYSICS

**PHY 101–Fundamentals of Physics I**     3 2 4
This course introduces fundamental physical concepts with emphasis on applications. Topics include systems of units, problem-solving methods, graphical analyses, vectors,

motion, forces, Newton's laws of motion, work, energy, power, momentum, and properties of matter. Upon completion, students should be able to demonstrate an understanding of the principles studied as applied to their specific programs. *This course is intended for certificate and diploma programs.*

**PHY 102–Fundamentals of Physics II       3 2 4**
This course introduces fundamental physical concepts with emphasis on applications. Topics include systems of units, problem-solving methods, graphical analyses, electrostatics, AC and DC circuits, magnetism, transformers, AC and DC motors, and generators. Upon completion, students should be able to demonstrate an understanding of the principles studied as applied to their specific programs. *This course is intended for certificate and diploma programs.*

**PHY 131–Physics-Mechanics       3 2 4**
This algebra/trigonometry-based course introduces fundamental physical concepts as applied to engineering technology fields. Topics include systems of units, problem-solving methods, graphical analysis, vectors, motion, forces, Newton's laws of motion, work, energy, power, momentum, and properties of matter. Upon completion, students should be able to apply the principles studied to applications in engineering technology fields. Prerequisites: MAT 161

**PHY 151–College Physics I       3 2 4**
This course uses algebra- and trigonometry-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include units and measurement, vectors, linear kinematics and dynamics, energy, power, momentum, fluid mechanics, and heat. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. Prerequisites: MAT 161. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

**PHY 152–College Physics II       3 2 4**
This course uses algebra- and trigonometry-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include electrostatic forces, electric fields, electric potentials, direct-current circuits, magnetostatic forces, magnetic fields, electromagnetic induction, alternating-current circuits, and light. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. Prerequisites: PHY 151. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

**PHY 251–General Physics I       3 3 4**
This course uses calculus-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include units and measurement, vector operations, linear kinematics and dynamics, energy, power, momentum, rotational mechanics, periodic motion, fluid mechanics, and heat. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. Prerequisites: MAT 271. Corequisites: MAT 272. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

**PHY 252–General Physics II       3 3 4**
This course uses a calculus-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include electrostatics forces, electric fields, electric potentials, direct-current circuits, magnetostatic forces, magnetic fields, electromagnetic induction, alternating-current circuits, and light. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. Prerequisite: MAT 272 and PHY 251. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

## PLUMBING

**PLU 110–Modern Plumbing       4 15 9**
This course introduces the tools, equipment, and materials associated with the plumbing industry. Topics include safety, use and care of tools, recognition and assembly of fittings and pipes, and other related topics. Upon completion, students should be able to safely assemble various pipes and fittings in accordance with state code requirements.

**PLU 120–Plumbing Applications       4 15 9**
This course covers general plumbing layout, fixtures, and water heaters. Topics include drainage, waste and vent pipes, water service and distribution, fixture installation, water heaters, and other related topics. Upon completion, students should be able to safely install common fixtures and systems in compliance with state and local building codes.

**PLU 130–Plumbing Systems       3 9 6**
This course covers the maintenance and repair of plumbing lines and fixtures. Emphasis is placed on identifying and diagnosing problems related to water, drain and vent lines, water heaters, and plumbing fixtures. Upon completion, students should be able to identify and diagnose needed repairs to the plumbing system.

**PLU 140–Intro to Plumbing Codes    1 2 2**
This course covers plumbing industry codes and regulations. Emphasis is placed on North Carolina regulations and the minimum requirements for plumbing materials and design. Upon completion, students should be able to research and interpret North Carolina plumbing codes.

**PLU 150–Plumbing Diagrams    1 2 2**
This course introduces sketching diagrams and interpretation of blueprints applicable to the plumbing trades. Emphasis is placed on plumbing plans for domestic and/or commercial buildings. Upon completion, students should be able to sketch plumbing diagrams applicable to the plumbing trades.

## POLITICAL SCIENCE

**POL 120–American Government    3 0 3**
This course is a study of the origins, development, structure, and functions of American national government. Topics include the constitutional framework, federalism, the three branches of government including the bureaucracy, civil rights and liberties, political participation and behavior, and policy formation. Upon completion, students should be able to demonstrate an understanding of the basic concepts and participatory processes of the American political system. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/ behavioral sciences.*

**POL 220–International Relations    3 0 3**
This course provides a study of the effects of ideologies, trade, armaments, and alliances on relations among nation-states. Emphasis is placed on regional and global cooperation and conflict, economic development, trade, non-governmental organizations, and international institutions such as the World Court and UN. Upon completion, students should be able to identify and discuss major international relationships, institutions, and problems. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

## PSYCHOLOGY

**PSY 101–Applied Psychology    3 0 3**
This course introduces the basic principles of psychology as they apply to daily life. Topics include perception, emotions, motivation, adjustment, behavior management, communication, and related topics that promote growth and development on the job and in one's personal life. Upon completion, students should be able to apply the principles learned in this class to everyday living. *This course is intended for certificate and diploma programs.*

**PSY 102–Human Relations    2 0 2**
This course covers the skills necessary to handle human relationships effectively. Topics include self-understanding, interpersonal communication, group dynamics, leadership skills, diversity, time and stress management, and conflict resolution with emphasis on work relationships. Upon completion, students should be able to demonstrate improved personal and interpersonal effectiveness. *This course is intended for certificate and diploma programs.*

**PSY 110–Life Span Development    3 0 3**
This course provides an introduction to the study of human growth and development. Emphasis is placed on the physical, cognitive, and psychosocial aspects of development from conception to death. Upon completion, students should be able to demonstrate knowledge of development across the life span and apply this knowledge to their specific field of study.

**PSY 118–Interpersonal Psychology    3 0 3**
This course introduces the basic principles of psychology as they relate to personal and professional development. Emphasis is placed on personality traits, communication/leadership styles, effective problem solving, and cultural diversity as they apply to personal and work environments. Upon completion, students should be able to demonstrate an understanding of these principles of psychology as they apply to personal and professional development.

**PSY 135–Group Processes    3 0 3**
This course provides an examination of group dynamics and structure. Topics include teambuilding, interpersonal communication, leadership, decision making, and problem solving. Upon completion, students should be able to demonstrate the knowledge and skills necessary for effective group participation.

**PSY 150–General Psychology    3 0 3**
This course provides an overview of the scientific study of human behavior. Topics include history, methodology, biopsychology, sensation, perception, learning, motivation, cognition, abnormal behavior, personality theory, social psychology, and other relevant topics. Upon completion, students should be able to demonstrate a basic knowledge of the science of psychology. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

**PSY 239–Psychology of Personality    3 0 3**
This course covers major personality theories and personality research methods. Topics include psychoanalytic, behavioristic, social learning, cognitive, humanistic, and trait theories including supporting research. Upon completion, students should be able to compare and contrast traditional and contemporary approaches to the understanding of individual

differences in human behavior. Prerequisites: PSY 150. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

**PSY 241–Developmental Psych** 3 0 3
This course is a study of human growth and development. Emphasis is placed on major theories and perspectives as they relate to the physical, cognitive, and psychosocial aspects of development from conception to death. Upon completion, students should be able to demonstrate knowledge of development across the life span. Prerequisites: PSY 150. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

**PSY 243–Child Psychology** 3 0 3
This course provides an overview of physical, cognitive, and psychosocial development from conception through adolescence. Topics include theories and research, interaction of biological and environmental factors, language development, learning and cognitive processes, social relations, and moral development. Upon completion, students should be able to identify typical and atypical childhood behavior patterns as well as appropriate strategies for interacting with children. Prerequisites: PSY 150. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

**PSY 281–Abnormal Psychology** 3 0 3
This course provides an examination of the various psychological disorders, as well as theoretical, clinical, and experimental perspectives of the study of psychopathology. Emphasis is placed on terminology, classification, etiology, assessment, and treatment of the major disorders. Upon completion, students should be able to distinguish between normal and abnormal behavior patterns as well as demonstrate knowledge of etiology, symptoms, and therapeutic techniques. Students are taught basic skills to assist in the assessment of disorders. Prerequisites: PSY 150. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

## RADIOGRAPHY

**RAD 110–Rad Intro & Patient Care** 2 3 0 3
This course provides an overview of the radiography profession and student responsibilities. Emphasis is placed on basic principles of patient care, radiation protection, technical factors, and medical terminology. Upon completion, students should be able to demonstrate basic skills in these areas. Prerequisites: Enrollment in Radiography program. Corequisites: RAD 111 and RAD 151

**RAD 111–RAD Procedures I** 3 3 0 4
This course provides the knowledge and skills necessary to perform standard radiographic procedures. Emphasis is placed on radiography of the chest, abdomen, extremities, spine, and pelvis. Upon completion, students should be able to demonstrate competence in these areas. Prerequisites: Enrollment in the Radiography program. Corequisites: RAD 110 and RAD 151

**RAD 112–RAD Procedures II** 3 3 0 4
This course provides the knowledge and skills necessary to perform standard radiographic procedures. Emphasis is placed on radiography of the skull, bony thorax, and gastrointestinal, biliary, and urinary systems. Upon completion, students should be able to demonstrate competence in these areas. Prerequisites: RAD 110, RAD 111, and RAD 151.

**RAD 121–Radiographic Imaging I** 2 3 0 3
This course covers factors of image quality and methods of exposure control. Topics include density, contrast, recorded detail, distortion, technique charts, manual and automatic exposure control, and tube rating charts. Upon completion, students should be able to demonstrate an understanding of exposure control and the effects of exposure factors on image quality. Prerequisites: RAD 110, RAD 111, and RAD 151. Corequisites: RAD 112 and RAD 161

**RAD 122–Radiographic Imaging II** 1 3 0 2
This course covers image receptor systems and processing principles. Topics include film, film storage, processing, intensifying screens, grids, and beam limitation. Upon completion, students should be able to demonstrate the principles of selection and usage of imaging accessories to produce quality images. Prerequisites: RAD 112, RAD 121, and RAD 161. Corequisites: RAD 131 and RAD 171

**RAD 131–Radiographic Physics I** 1 3 0 2
This course introduces the fundamental principles of physics that underlie diagnostic X-ray production and radiography. Topics include electromagnetic waves, electricity and magnetism, electrical energy, and power and circuits as they relate to radiography. Upon completion, students should be able to demonstrate an understanding of basic principles of physics as they relate to the operation of radiographic equipment. Prerequisites: RAD 112, RAD 121, and RAD 161. Corequisites: RAD 122 and RAD 171

**RAD 151–RAD Clinical Ed I** 0 0 6 2
This course introduces patient management and basic radiographic procedures in the clinical setting. Emphasis is placed on mastering positioning of the chest and extremities, manipulating equipment, and applying principles of ALARA. Upon completion, students should be able to demonstrate successful completion of clinical objectives. Prerequisites: Enrollment in the Radiography program. Corequisites: RAD 110 and RAD 111

**RAD 161–RAD Clinical Ed II**     0 0 15 5
This course provides additional experience in patient management and in more complex radiographic procedures. Emphasis is placed on mastering positioning of the spine, pelvis, head and neck, and thorax and adapting procedures to meet patient variations. Upon completion, students should be able to demonstrate successful completion of clinical objectives. Prerequisites: RAD 110, RAD 111, and RAD 151. Corequisites: RAD 112 and RAD 121

**RAD 171–RAD Clinical Ed III**     0 0 12 4
This course provides experience in patient management specific to fluoroscopic and advanced radiographic procedures. Emphasis is placed on applying appropriate technical factors to all studies and mastering positioning of gastrointestinal and urological studies. Upon completion, students should be able to demonstrate successful completion of clinical objectives. Prerequisites: RAD 112, RAD 121, and RAD 161. Corequisites: RAD 122 and RAD 131

**RAD 211–RAD Procedures III**     2 3 0 3
This course provides the knowledge and skills necessary to perform standard and specialty radiographic procedures. Emphasis is placed on radiographic specialty procedures, pathology, and advanced imaging. Upon completion, students should be able to demonstrate competence in these areas. Prerequisites: RAD 122. Corequisites: RAD 231, RAD 241, and RAD 251

**RAD 231–Radiographic Physics II**     1 3 0 2
This course continues the study of physics that underlie diagnostic X-ray production and radiographic and fluoroscopic equipment. Topics include X-ray production, electromagnetic interactions with matter, X-ray devices, equipment circuitry, targets, filtration, and dosimetry. Upon completion, students should be able to demonstrate an understanding of the application of physical concepts as related to image production. Prerequisites: RAD 171. Corequisites: RAD 211, RAD 241, and RAD 251

**RAD 241–Radiation Protection**     2 0 0 2
This course covers the principles of radiation protection and radiobiology. Topics include the effects of ionizing radiation on body tissues, protective measures for limiting exposure to the patient and personnel, and radiation monitoring devices. Upon completion, students should be able to demonstrate an understanding of the effects and uses of radiation in diagnostic radiology. Prerequisites: RAD 122, RAD 131, and RAD 171. Corequisites: RAD 211, RAD 231, and RAD 251

**RAD 245–Radiographic Analysis**     2 3 0 3
This course provides an overview of imaging concepts and introduces methods of quality assurance. Topics include a systematic approach for image evaluation and analysis of imaging service and quality assurance. Upon completion, students should be able to establish and administer a quality assurance program and conduct a critical review of images. Prerequisites: RAD 251. Corequisites: RAD 261

**RAD 251–RAD Clinical Ed IV**     0 0 21 7
This course provides the opportunity to continue mastering all basic radiographic procedures and to attain experience in advanced areas. Emphasis is placed on equipment operation, pathological recognition, pediatric and geriatric variations, and a further awareness of radiation protection requirements. Upon completion, students should be able to demonstrate successful completion of clinical objectives. Prerequisites: RAD 122, RAD 131, and RAD 171. Corequisites: RAD 211, RAD 231, and RAD 241

**RAD 261–RAD Clinical Ed V**     0 0 21 7
This course is designed to enhance expertise in all radiographic procedures, patient management, radiation protection, and image production and evaluation. Emphasis is placed on developing an autonomous approach to the diversity of clinical situations and successfully adapting to those procedures. Upon completion, students should be able to demonstrate successful completion of clinical objectives. Prerequisites: RAD 251. Corequisites: RAD 245

## READING

*Initial student placement in developmental courses is based on individual college placement testing policies and procedures. Students should begin developmental course work at the appropriate level indicated by that college's placement test.*

**RED 080–Intro to College Reading**     3 2 4
This course introduces effective reading and inferential thinking skills in preparation for RED 090. Emphasis is placed on vocabulary, comprehension, and reading strategies. Upon completion, students should be able to determine main ideas and supporting details, recognize basic patterns of organization, draw conclusions, and understand vocabulary in context. Prerequisites: Placement. *This course does not satisfy the developmental reading prerequisite for ENG.*

**RED 090–Improved College Reading**     3 2 4
This course is designed to improve reading and critical thinking skills. Topics include vocabulary enhancement; extracting implied meaning; analyzing author's purpose, tone, and style; and drawing conclusions and responding to written material. Upon completion, students should be able to comprehend and analyze college-level reading material. Prerequisites: RED 080 or Placement. *This course satisfies the developmental reading prerequisite for ENG 111.*

# RELIGION

**REL 110–World Religions          3 0 3**
This course introduces the world's major religious traditions. Topics include Primal religions, Hinduism, Buddhism, Islam, Judaism, and Christianity. Upon completion, students should be able to identify the origins, history, beliefs, and practices of the religions studied. The subject matter is taught from a nonsectarian stance not promoting any particular group's religious beliefs. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**REL 111–Eastern Religions          3 0 3**
This course introduces the major Asian religious traditions. Topics include Hinduism, Buddhism, Taoism, Confucianism, and Shinto. Upon completion, students should be able to identify the origins, history, beliefs, and practices of the religions studied. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**REL 112–Western Religions          3 0 3**
This course introduces the major western religious traditions. Topics include Zoroastrianism, Islam, Judaism, and Christianity. Upon completion, students should be able to identify the origins, history, beliefs, and practices of the religions studied. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**REL 211–Intro to Old Testament          3 0 3**
This course is a survey of the literature of the Hebrews with readings from the law, prophets, and other writings. Emphasis is placed on the use of literary, historical, archeological, and cultural analysis. Upon completion, students should be able to use the tools of critical analysis to read and understand Old Testament literature. The subject matter is taught from a nonsectarian stance not promoting any particular group's religious beliefs. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**REL 212–Intro to New Testament          3 0 3**
This course is a survey of the literature of first-century Christianity with readings from the gospels, Acts, and the Pauline and pastoral letters. Topics include the literary structure, audience, and religious perspective of the writings, as well as the historical and cultural context of the early Christian community. Upon completion, students should be able to use the tools of critical analysis to read and understand New Testament literature. The subject matter is taught from a nonsectarian stance not promoting any particular group's religious beliefs. *This course has been*
*approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**REL 221–Religion in America          3 0 3**
This course is an examination of religious beliefs and practice in the United States. Emphasis is placed on mainstream religious traditions and non-traditional religious movements from the Colonial period to the present. Upon completion, students should be able to recognize and appreciate the diversity of religious traditions in America. This is a summer travel course. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

# REAL ESTATE

**RLS 112–Real Estate Fundamentals          4 0 4**
This course provides basic instruction in real estate principles and practices. Topics include law, finance, brokerage, closing, valuation, management, taxation, mathematics, construction, land use, property insurance, and NC License Law and Commission Rules. Upon completion, students should be able to demonstrate basic knowledge and skills necessary for real estate sales. Prerequisites: Satisfactory college placement test scores in reading and mathematics; or a grade of "S" in RED 090 (Improved College Reading –3-2-4), and a grade of "C" or higher in MAT 060; or permission of the Dean of Business Technologies.

**RLS 113–Real Estate Mathematics          2 0 2**
This course provides basic instruction in business mathematics applicable to real estate situations. Topics include area computations, percentage of profit/loss, bookkeeping and accounting methods, appreciation and depreciation, financial calculations and interest yields, property valuation, insurance, taxes, and commissions. Upon completion, students should be able to demonstrate proficiency in applied real estate mathematics.

**RLS 114–Real Estate Brokerage          2 0 2**
This course provides basic instruction in the various real estate brokerage operations, including trust account records and procedures. Topics include establishing a brokerage firm, management concepts and practices, personnel and training, property management, advertising and publicity, records and bookkeeping systems, and financial operations. Upon completion, students should be able to establish, operate, and manage a realty brokerage practice in a manner which protects and serves the public interest. Prerequisites: RLS 112 or current Real Estate license

**RLS 115–Real Estate Finance          2 0 2**
This course provides advanced instruction in financing real estate transactions and real property valuation. Topics include sources of mortgage funds, financing instruments, mortgage

types, loan underwriting, essential mathematics, and property valuation. Upon completion, students should be able to demonstrate knowledge of real estate finance necessary to act as real estate brokers. Prerequisites: RLS 112 or current Real Estate license

**RLS 116–Real Estate Law          2 0 2**
This course provides advanced instruction in legal aspects of real estate brokerage. Topics include property ownership and interests, brokerage relationships, agency law, contracts, settlement statements, and NC License Law and Commission Rules. Upon completion, students should be able to demonstrate knowledge of laws relating to real estate brokerage necessary to act as real estate brokers. Prerequisites: RLS 112 or current Real Estate license

## SOCIOLOGY

**SOC 210–Introduction to Sociology     3 0 3**
This course introduces the scientific study of human society, culture, and social interactions. Topics include socialization, research methods, diversity and inequality, cooperation and conflict, social change, social institutions, and organizations. Upon completion, students should be able to demonstrate knowledge of sociological concepts as they apply to the interplay among individuals, groups, and societies. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

**SOC 213–Sociology of the Family     3 0 3**
This course covers the institution of the family and other intimate relationships. Emphasis is placed on mate selection, gender roles, sexuality, communication, power and conflict, parenthood, diverse lifestyles, divorce and remarriage, and economic issues. Upon completion, students should be able to analyze the family as a social institution and the social forces which influence its development and change. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

**SOC 220–Social Problems          3 0 3**
This course provides an in-depth study of current social problems. Emphasis is placed on causes, consequences, and possible solutions to problems associated with families, schools, workplaces, communities, and the environment. Upon completion, students should be able to recognize, define, analyze, and propose solutions to these problems. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

**SOC 225–Social Diversity          3 0 3**
This course provides a comparison of diverse roles, interests, opportunities, contributions, and experiences in social life. Topics include race, ethnicity, gender, sexual orientation, class, and religion. Upon completion, students should be able to analyze how cultural and ethnic differences evolve and how they affect personality development, values, and tolerance. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

## SPANISH

**SPA 111–Elementary Spanish I     3 0 3**
This course introduces the fundamental elements of the Spanish language within a cultural context. Emphasis is placed on the development of basic listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written Spanish and demonstrate cultural awareness. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**SPA 112–Elementary Spanish II     3 0 3**
This course is a continuation of SPA 111 focusing on the fundamental elements of the Spanish language within a cultural context. Emphasis is placed on the progressive development of listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written Spanish and demonstrate further cultural awareness. Prerequisites: SPA 111. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**SPA 181–Spanish Lab I          0 2 1**
This course provides an opportunity to enhance acquisition of the fundamental elements of the Spanish language. Emphasis is placed on the progressive development of basic listening, speaking, reading, and writing skills through the use of various supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written Spanish, and to demonstrate cultural awareness. Corequisites: Be enrolled in SPA 111

**SPA 182–Spanish Lab II          0 2 1**
This course provides an opportunity to enhance acquisition of the fundamental elements of the Spanish language. Emphasis is placed on the progressive development of basic listening, speaking, reading, and writing skills through the use of various supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written Spanish, and to demonstrate cultural awareness. Prerequisites: SPA 181 Corequisites: Be enrolled in SPA 112.

**SPA 211–Intermediate Spanish I    3 0 3**
This course provides a review and expansion of the essential skills of the Spanish language. Emphasis is placed on the study of authentic and representative literary and cultural texts. Upon completion, students should be able to communicate effectively, accurately, and creatively about the past, present, and future. Prerequisites: SPA 112. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**SPA 212–Intermediate Spanish II    3 0 3**
This course provides a continuation of SPA 211. Emphasis is placed on the continuing study of authentic and representative literary and cultural texts. Upon completion, students should be able to communicate spontaneously and accurately with increasing complexity and sophistication. Prerequisites: SPA 211. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**SPA 281–Spanish Lab III    0 2 1**
This course provides an opportunity to enhance the review and expansion of the essential skills of the Spanish language. Emphasis is placed on the study of authentic and representative literary and cultural texts through the use of various supplementary learning media and materials. Upon completion, students should be able to communicate effectively, accurately, and creatively about the past, present, and future. Prerequisites: SPA 182 Corequisites: Be enrolled in SPA 211

**SPA 282–Spanish Lab IV    0 2 1**
This course provides an opportunity to enhance the review and expansion of the essential skills of the Spanish language. Emphasis is placed on the continuing study of authentic and representative literary and cultural texts through the use of various supplementary learning and materials. Upon completion, students should be able to communicate spontaneously and accurately with increasing and sophistication. Prerequisite: SPA 181. Be enrolled in SPA 212.

## SURGICAL TECHNOLOGY

**SUR 110–Intro to Surg Tech    2 0 0 2**
This course provides a comprehensive study of the operative environment, professional roles, moral/legal/ethical responsibilities, and medical communication techniques used in surgical technology. Topics include historical development, medical terminology, physical environment and safety measures, interdepartmental/peer/patient relationships, and professional behaviors. Upon completion, students should be able to apply theoretical knowledge of the course topics to the operative environment. Prerequisites: Enrollment in the Surgical Technology or Central Sterile programs. Corequisites: SUR 111

**SUR 111–Periop Patient Care    5 6 0 7**
This course provides theoretical knowledge for the application of essential operative skills during the perioperative phase. Topics include surgical asepsis, sterilization/disinfection, and perioperative patient care. Upon completion, students should be able to demonstrate the principles and practices of aseptic technique, sterile attire, basic case preparation, and other relevant skills. Prerequisites: Enrollment in the Surgical Technology Program Corequisites: SUR 110

**SUR 122–Surgical Procedures I    5 3 0 6**
This course introduces surgical pharmacology, anesthesia, wound healing physiology, and general, gastrointestinal, obstetrical/gynecological, urological, ENT and plastic surgery specialities. Emphasis is placed on related surgical anatomy, pathology, and procedures thereby enhancing theoretical knowledge of patient care, instrumentation, supplies, and equipment. Upon completion, students should be able to correlate, integrate, and apply theoretical knowledge of the course topics. Prerequisites: SUR 110 and SUR 111. Corequisites: SUR 123 and CSP 110

**SUR 123–SUR Clinical Practice I    0 0 21 7**
This course provides clinical experience with a variety of perioperative assignments to build upon skills learned in SUR 111. Emphasis is placed on the scrub and circulating roles of the surgical technologist including aseptic technique and basic case preparation for selected surgical procedures. Upon completion, students should be able to prepare, assist with, and dismantle basic surgical cases in both the scrub and circulating roles.

**SUR 134–Surgical Procedures II    5 3 0 6**
This course introduces orthopedic, neurosurgical, peripheral vascular, thoracic, cardiovascular, and ophthalmology surgical specialties. Emphasis is placed on related surgical anatomy, pathology, and procedures thereby enhancing theoretical knowledge of patient care, instrumentation, supplies, and equipment. Upon completion, students should be able to correlate, integrate, and apply theoretical knowledge of the course topics. Prerequisites: SUR 123

**SUR 135–SUR Clinical Practice II    0 0 12 4**
This course provides clinical experience with a variety of perioperative assignments to build skills required for complex perioperative patient care. Emphasis is placed on greater technical skills, critical thinking, speed, efficiency, and autonomy in the operative setting. Upon completion, students should be able to function in the role of an entry-level surgical technologist. Prerequisites: SUR 123

**SUR 137–Prof Success Prep    1 0 0 1**
This course provides job-seeking skills and an overview of theoretical knowledge in preparation for certification. Topics include test-taking strategies, resume preparation, and interviewing techniques. Upon completion, students

should be able to prepare a resume, demonstrate appropriate interview techniques, and identify strengths and weaknesses in preparation for certification. Prequisites: SUR 123. Corequisites: SUR 134 and SUR 135

**SUR 210–Adv SUR Clinical Practice 0 0 6 2**
This course is designed to provide individualized experience in advanced practice, education, circulating, and managerial skills. Emphasis is placed on developing and demonstrating proficiency in skills necessary for advanced practice. Upon completion, students should be able to assume leadership roles in a chosen specialty area. Prerequisites: SUR 137. Corequisites: SUR 211

**SUR 211–Adv Theoretical Concepts 2 0 0 2**
This course covers theoretical knowledge required for extension of the surgical technologist role. Emphasis is placed on advanced practice in complex surgical specialties, educational methodologies, and managerial skills. Upon completion, students should be able to assume leadership roles in a chosen specialty area. Prerequisites: SUR 137. Corequisites: SUR 210.

## WELDING

**WLD 110–Cutting Processes 1 3 2**
This course introduces oxy-fuel and plasma-arc cutting systems. Topics include safety, proper equipment setup, and operation of oxy-fuel and plasma-arc cutting equipment with emphasis on straight line, curve and bevel cutting. Upon completion, students should be able to oxy-fuel and plasma-arc cut metals of varying thickness.

**WLD 111–Oxy-Fuel Welding 1 3 2**
This course introduces the oxy-fuel welding process. Topics include safety, proper equipment setup, and operation of oxy-fuel welding equipment with emphasis on bead application, profile, and discontinuities. Upon completion, students should be able to oxy-fuel weld fillets and grooves on plate and pipe in various positions.

**WLD 112–Basic Welding Processes 1 3 2**
This course introduces basic welding and cutting. Emphasis is placed on beads applied with gases, mild steel fillers, and electrodes and the capillary action of solder. Upon completion, students should be able to set up welding and oxy-fuel equipment and perform welding, brazing, and soldering processes.

**WLD 115–SMAW (Stick) Plate 2 9 5**
This course introduces the shielded metal arc (stick) welding process. Emphasis is placed on padding, fillet, and groove welds in various positions with SMAW electrodes. Upon completion, students should be able to perform SMAW fillet and groove welds on carbon plate with prescribed electrodes.

**WLD 121–GMAW (MIG) FCAW/Plate 2 6 4**
This course introduces metal arc welding and flux core arc welding processes. Topics

include equipment setup and fillet and groove welds with emphasis on application of GMAW and FCAW electrodes on carbon steel plate. Upon completion, students should be able to perform fillet welds on carbon steel with prescribed electrodes in the flat, horizontal, and overhead positions.

**WLD 122–GMAW (MIG) Plate/Pipe 1 6 3**
This course is designed to enhance skills with the gas metal arc (MIG) welding process. Emphasis is placed on advancing skills with the GMAW process making groove welds on carbon steel plate and pipe in various positions. Upon completion, students should be able to perform groove welds with prescribed electrodes on various joint geometry. Prerequisites: WLD 121

**WLD 131–GTAW (TIG) Plate 2 6 4**
This course introduces the gas tungsten arc (TIG) welding process. Topics include correct selection of tungsten, polarity, gas, and proper filler rod with emphasis placed on safety, equipment setup, and welding techniques. Upon completion, students should be able to perform GTAW fillet and groove welds with various electrodes and filler materials.

**WLD 132–GTAW (TIG) Plate/Pipe 1 6 3**
This course is designed to enhance skills with the gas tungsten arc (TIG) welding process. Topics include setup, joint preparation, and electrode selection with emphasis on manipulative skills in all welding positions on plate and pipe. Upon completion, students should be able to perform GTAW welds with prescribed electrodes and filler materials on various joint geometry. Prerequisites: WLD 131

**WLD 141–Symbols & Specifications 2 2 3**
This course introduces the basic symbols and specifications used in welding. Emphasis is placed on interpretation of lines, notes, welding symbols, and specifications. Upon completion, students should be able to read and interpret symbols and specifications commonly used in welding.

**WLD 215–SMAW (Stick) Pipe 1 9 4**
This course covers the knowledge and skills that apply to welding pipe. Topics include pipe positions, joint geometry, and preparation with emphasis placed on bead application, profile, and discontinuities. Upon completion, students should be able to perform SMAW welds to applicable codes on carbon steel pipe with prescribed electrodes in various positions. Prerequisites: WLD 115

# NON-CREDIT PROGRAMS

# INDUSTRY AND COMMUNITY SERVICE

## STRATEGIC VISION (Statement of Purpose)

Industry and Community Service, in partnership with business and industry and community agencies, strengthens the economic, civic, and cultural life in Cleveland County. The Unit does this by offering a variety of courses and programs which meet the needs of people beyond compulsory school age whose major occupation may not be that of a full time student. Broad categories of services are workforce development, economic development, basic skills and literacy education, and quality of life enhancement.

## Goals:

1. Lead the College in refining the Industry and Community Service Plan which addresses four major areas: workforce development (training and retraining), economic development (services to business and industry), basic skills and literacy education, and quality of life enhancement (cultural and leisure programming).
2. Continuously evaluate instructional and program effectiveness.
3. Continue refinement of student support services such as registration, student records, and student information.
4. Provide leadership that promotes systems thinking to ensure a more effective Student Information System.
5. Continue staff development that encompasses current national trends and issues by providing specific training for Industry and Community Service team needs and which results in an Industry and Community Service identity.
6. Identify and acquire human and fiscal resources to meet student needs.
7. Continuously evaluate College/community partnerships and events to improve and expand services to students and the community.

## CONTINUING EDUCATION PROGRAMS

Adult or Continuing Education as defined in this catalog includes activities designed to meet the needs of people beyond compulsory school age whose major occupation may not be that of a full time student. It is the purpose of Cleveland Community College to afford this opportunity to each individual to develop to the fullest potential in vocational, intellectual, or cultural areas. It is also the aim of the College to be of service to area industries, businesses, and public agencies by providing training and upgrading for employees. In order to meet these aims, the Extension and Adult Education Division of the College will help make continuing education available by offering a variety of courses and programs.

The extent of different programs and courses is based upon the interest shown by the community, availability of competent instructors, and the limitations of available equipment, space, and funds. Whenever possible, courses are scheduled as community needs or interests are indicated. Some classes, constantly in demand, are offered on a continuing basis. Others are started at the requests and suggestions for additional courses.

Continuing education classes conducted by Cleveland Community College have two classifications: occupational, and community service programs. The classes are non-curriculum, vary in length, conducted both day and evening, and are taught by qualified instructors selected by the College. A schedule of some classes being offered is announced by the College prior to each term and other classes are announced during the term, as they are arranged.

## ADMISSION

Any adult 18 years or older or any public school student 16 years or older with valid dual enrollment forms are eligible to enroll.

## REGISTRATION

Registration will be held at the first class meeting unless specified otherwise. In some instances when enrollment is limited, adults should notify the College by phone, letter, or personal visit to place their names on the pre-registration list for classes.

## EXPENSES

Fees for occupational extension are set by the North Carolina Legislature. Community Services fees are set by Cleveland Community College's Board of Trustees. Registration fees are waived for Fire Service and Law Enforcement Training Programs including Civil Preparedness courses, programs for Emergency Medical personnel, and North Carolina residents 65 years of age or older except for self supporting courses. A charge may be necessary in some courses for class supplies. Books, when required, are available through the College Store for both campus and off-campus classes.

## REFUNDS

Cleveland Community College's refund policy is as follows:
1. A pre-registered extension student who officially withdraws from an extension class prior to the first day will be eligible for a 100% refund, if requested.
2. For a class that meets 4 times or less, a 75% refund shall be made upon the request of the student if the student officially withdraws prior to or on the first day of class.

3. For classes meeting 5 or more times, a 75% refund upon request of student if the student officially withdraws prior to or on the official 10% point of the class. A request for a refund will not be considered after the 10% point.

## CLASS LOCATIONS

Many of the Continuing Education classes are held on the campus at Cleveland Community College. Others are conducted throughout Cleveland County in public schools, community centers, churches, industries, businesses or wherever a suitable meeting place can be arranged. Classes may be organized in any community whenever a sufficient number of prospective class members indicate an interest.

## ATTENDANCE

A minimum enrollment of 15 persons is needed to conduct a class. Adults are expected to attend class regularly. Attendance records are maintained by the instructors. Insufficient enrollment or attendance may result in cancellation of the class.

## CERTIFICATES

Certificates are awarded in certain classes to students successfully completing course requirements. Also, a certificate of High School Equivalency (GED) is awarded to adults who successfully complete the high school equivalency tests.

## INSTRUCTORS

Qualified instructors, as determined by the Extension and Adult Education Divisions, will be employed for Continuing Education classes.

## OCCUPATIONAL EXTENSION EDUCATION PROGRAMS

Extension classes are designed to meet the needs of industry, business, and other areas of occupational endeavor. Specifically, classes may be organized when there is a need for:
1. Upgrading for those within a specific occupation.
2. Retraining classes for those wishing to change their vocation.
3. Preparation of individuals for initial employment.

All classes are organized where a demand for certain skills is required, based upon the needs of the firm or group as represented. The classes may be arranged on a short or long-range schedule as needed. Flexibility is the key asset in the Occupational Extension Program.

An individual may only repeat an occupational extension class one time.

The following is a partial list of the many broad areas of instruction in which training is available:

**Fire Service Training**
**Law Enforcement Training**
**Industrial Training**

## NEW INDUSTRY TRAINING

One of the primary functions of Cleveland Community College is to stimulate the creation of more challenging and rewarding jobs for the people of our area by providing a type of training geared to the needs of new and/or expanding industries. With some limitations, this institution, in cooperation with the Industrial Services Division of the State Department of Community Colleges, will design and administer special programs for training the production manpower required by any new or expanding industry which results in creating new job opportunities for North Carolina.

In addition to helping any new or expanding industry meet its immediate manpower needs the program seeks to encourage each industry to develop a long-range training program of its own to satisfy its continuing replacement and retraining needs.

For further information on the New or Expanding Industry program, please contact the Department of Continuing Education, Cleveland Community College, or the Director of the Industrial Services Division, North Carolina Department of Community Colleges, Raleigh, North Carolina.

## GENERAL ADULT EDUCATION

General Adult and Community Service classes and programs are offered through the Extension Division of Cleveland Community College to enable individuals to gain personal satisfaction and knowledge through self-advancement. These programs include opportunities for intellectual growth, the development of creative skills or talents, the learning of hobby or leisure time activities, and the opportunity of gaining civic and cultural awareness.

## TEACHERS' CERTIFICATE RENEWAL

Teachers' certificate renewal courses and workshops are provided by Cleveland Community College in cooperation with the local public school systems within the county.

The courses and workshops are initiated by the College or the public school systems based on interests and needs expressed by school teachers and officials. In the past, these have included such courses as Great Decisions, Psychology, Guitar, Drawing and Sketching, Anthropology, Computer Training, and Media Workshops.

When a need for a particular course has been determined, Cleveland Community College, working cooperatively with the public schools in-service directors, plans and organizes the class, scheduling it for a time convenient to the participants.

Teachers receive renewal credit based on course approval from their local public school system.

## FOCUSED INDUSTRIAL TRAINING

The primary goal of the program is to provide a comprehensive training program capable of meeting the needs of the industries of Cleveland County. The College works jointly with industrial representatives to assess their needs and provides appropriate training to upgrade their employees' skill levels.

Working cooperatively with industry, the staff selects course content, decides on the length, time, and location for the course to be offered. Instructional personnel are selected for training courses on the basis of competence in the specific subject area to be taught.

The training is conducted on a competency based instructional mode. External and internal evaluation of trainee progress by the program staff and the trainee's employer is a cooperative venture.

## COMPREHENSIVE EDUCATION PROJECT

The Comprehensive Education Project which is located at the correctional institute is structured toward meeting the academic, vocational, and social needs of selected medium custody inmates who plan to reside in the South Piedmont area when paroled.

Upon completion of the program, the inmates receive a certificate in the vocational areas of Electrical Installation and Maintenance (9 months), Welding (6 months), Residential Carpentry (9 months), Plumbing (6 months). The inmates attend class 30 hours a week.

Related subjects are required in the areas of reading, math, and human relations. Preparation for the GED examination is also available with the test being administered monthly.

It is anticipated that each inmate who completes the Comprehensive Education Project will acquire the necessary vocational skills to obtain permanent employment under the work-release program and retain this employment upon his release.

## CONTINUING EDUCATION
## COMMUNITY SERVICE PROGRAMS

**Algebra:** A course designed to teach the basic fundamental concepts and operations of algebraic computations including grouping, factoring ratio and proportion, and quadratic equations. Application to practical problems will be stressed.

**Basketweaving:** Students will learn the history and techniques of various basketweaving styles, such as: market baskets, key baskets, egg baskets, round baskets using a variety of weaving techniques and materials.

**Bookkeeping:** A course dealing with methods of recording and reporting business records. Practical work is done involving business, individual, and family bookkeeping.

**Business Mathematics:** A study of mathematical solutions to business problems including graphical representation of business data and the concepts of various functions as tools for analyzing pertinent business data.

**Cake Decorating:** An ideal course for the homemaker who would like to learn the art and techniques of decorating cakes for all occasions. Instruction will include preparation and application of various icings, borders, writing, drawing, and making flowers for cakes.

**Candy Making:** Instruction in how to make professional looking candies will be stressed. Recipes, correct procedures, and use of candy thermometer will be covered. 33 hours.

**Ceramics:** A popular class where students learn of the information, finishing, and firing of creative pottery. Finishing processes will include pouring, cleaning the greenware, decorating, glazing, and firing for the finished product.

**China Painting:** A course in which various types of designs and flowers are applied to chinaware and tiles. Practice in painting and firing is included in the course.

**Creative Crafts:** Instruction includes techniques in making a variety of items such as pocketbooks, pot holders, hanging tables, clocks, christmas ornaments, and much more.

**Crewel Embroidery:** The class will learn a variety of stitches with different types of threads; needlepoint, and cross stitching. Students are encouraged to create their own designs.

**Crochet:** A course in the basic principles and art of crocheting, including the actual construction of articles and designs from simple to complex. Students furnish their own materials.

**Custom Sewing:** An advanced course for those students who wish to progress beyond dressmaking. Students will make suits, coats, men's and ladies' sportswear, and other projects as desired by individual members of the class.

**Drawing:** The course includes one-minute gesture drawings, contour drawings, modeled drawings, and quick form studies. Media used are pencil, pen and ink, ink wash, crayon, and water colors. Perspective and drapery studies are included.

**Effective Speaking:** Theory and practice in the art of effective speaking. Instruction will center around methods of planning and presenting

the talk. Class reactions will be used as a method of evaluation and emphasis placed on the dynamics of public speaking. Self-confidence, poise, creative thinking, personality development, and effective communications with others will be addressed.

**Floral Design:** A practical course related to actual arrangements of live and artificial flowers. Students learn uses of flowers, containers and accessories, design principles, color and texture, and arrangements for special occasions.

**Genealogy/Local History (N.C.):** This course has a two-fold purpose; to teach the mechanics of genealogy with opportunities to apply the lessons learned; and to teach the history of North Carolina with special emphasis on local history. Several field trips are included.

**Holiday Decorations:** (Arts and Crafts). An exciting class with emphasis on handcrafts and hobbies for home decorating and other occasions. Students will learn to make useful items from such things as bottles, cards, and numerous other scrap materials.

**Income Tax Preparation:** Instructions are offered in basic fundamentals of individual income tax preparation. Topics considered are gross income, deductions and exemptions, joint and separate returns, tax computations, and methods of reporting income. Both state and federal forms are covered in this class.

**Interior Decorating:** Primary attention will be given to art and practice of decorating. Emphasis will be given to choice and arrangement of furniture; color and how to use it; flooring surfaces and floor covering; window treatment with draperies and curtains.

**Knitting:** Instruction will be given in the basic stitches; knitting language—its terms, definitions, symbols and abbreviations; pattern reading; knit tips. Each student is asked to complete a small project during the course.

**Metric System:** A basic course in the use of the Metric System. Conversion tables are used in the class in order that students may become familiar with metrical computations as compared to conventional methods.

**Motorcycle Mechanics:** This course is especially designed for those people interested in servicing their own motorcycles and other small engines. Students who complete this course will be able to service and repair their own motorcycles.

**Music Theory:** This course is designed for pianists, organists, and other musicians with no formal training in music theory. Course includes major and minor scales; major, minor and dominant seventh chords; elementary harmony; simple modulation, transposition of simple pieces; sight singing; and an investigation of rhythm.

**Needlepoint:** The student learns to do background stitches; a variety of novelty stitches; transfer of graphs and charts to blank needlepoint canvas, and from that step to transfer on mesh canvas. Finally the student has learned to create a design to be worked in needlepoint for whatever purpose the student intends—upholstery material, draperies, framing, wall hanging, etc.

**Nutrition and Weight Control:** Training in selection of proper diet for best health, avoiding obesity and related disease, determining one's proper weight, how to achieve and maintain it.

**Oil Painting:** Classes are organized for both beginners and more advanced students. Techniques used include brush and palette knife painting, color mixing, composition and design, canvas stretching. Types of painting include academic, impressionistic, and modern.

**Painting with Acrylics:** Same as for oils with more emphasis on modern techniques in the use of the versatile material which is easy to handle, fast drying, waterproof, and easy to mix for different colors. Instruction will involve mixed media and various painting methods.

**Photography, beginning:** Basic beginner's class in black and white and color photography. Class will cover camera operation, photographic techniques, with black and white film processing and printing.

**Photography, advanced:** Advanced class in color photography involving composition and advanced photographic techniques including color printing.

**Picture Framing and Matting:** A general course in introduction to picture framing and matting. The course will introduce students to proper tool selection, measuring, wood selection, mitering and selection, and proper mat cutting.

**Porcelain:** Advanced students will learn complete process of porcelain doll making as well as other porcelain items; pouring, cleaning greenware; cutting out eyes and insertion; painting dolls; assembling and wigging. Some dressing instruction. Heritage heirloom instruction. Can produce (3) three dolls in class.

**Psychology:** The basic principles of psychology are explored and how they may be applied to practical problems of everyday life. The aim of the course is to help people get along better in school, jobs, and human relations.

**Quilting, advanced:** Instruction in the techniques of quilting which will include: patchwork, applique, shadow appliques, soft shading, lap quilting, making pillows, drafting patterns, and continuous bias binding.

**Quilting, beginning:** Instruction in the basic techniques and terminologies of quilting for the beginner.

**Real Estate License Renewal:** A course designed to give real estate agents their four-hour mandatory continuing education requirement and four-hour elective.

**Securities and Investments:** Stocks, bonds, and mutual funds will be the central area of focus in this course. Discussions will include the operation of the stock exchanges, buying and selling procedures, analysis of stocks and bonds for investment purposes, and when to buy and sell.

**Sewing:** Designed for new sewer or anyone who wishes to brush up on basic sewing techniques. Time will be devoted to learning the necessary equipment for successful sewing, proper selection and fitting of pattern and materials; step by step construction of one or more garments; lectures, demonstrations, practical applications of sewing procedures; individual instruction in use of machines during class time.

**Short Story Writing:** This course will provide the beginning writer with an understanding of the basic concepts of the elements and structure of a short story. Content will include characterization, mood, perspective, plot, and use of symbolism.

**Sign Language I:** Instruction is designed for the parents of deaf children and for others who come in contact with deaf people. Classes begin with finger spelling and continue through the more difficult signs.

**Sign Language II:** Prerequisite Sign Language I. Instruction will build on signing learned in Sign Language I. Some class meetings will be with deaf groups.

**Sketching:** An interesting and basic class for the art student who wishes to learn more about drawing simple shapes, one and two-point perspective drawing, and shadowing. Practice exercises with various drawing materials will be used.

**Small Engine Repair:** Instruction in the techniques of two and four cycle engine repair including reconditioning, tune-ups, replacement of parts, and detection of engine trouble.

**Speed Reading:** A program designed for the average adult reader who needs to improve overall reading efficiency including speed, comprehension, and flexibility. This course welcomes the supervisors and others in management positions who have much paper work and those jobs require much reading.

**Stained Glass:** The course is designed to teach all techniques in cutting and fitting stained glass in the making of lamps, planters, decorative ornaments, jewel boxes, pictures, etc.

**Tole Painting:** An interesting technique, rather than talent, where patterns of decorative design are painted on tin, wood, glass, and metal. Designs are stenciled on material and painted in acrylics or oils. The art of tole painting is the way the brush is held and turned to make details.

**Upholstery:** Instruction includes the techniques of general furniture upholstery, including webbing, springing, stuffing, trimming, sewing, restoring, repairing, mounting, and tying springs. Equipment is furnished but students supply their own materials and may work on their own furniture with direction and assistance from the instructor.

**Water Colors:** In this class art students will work with various materials and equipment, color mixing, using wet and dry paper, composition, and design. Other techniques will include watercolor tricks, inks, and calligraphy.

**Woodworking:** This course is designed to help the woodworking enthusiast in the use, care, and safe practice of basic hand and power tools. Considerable time will be spent in the shop in practical use of skills learned. Woodworking projects completed by the student may be retained for personal use.

## CONTINUING EDUCATION
## OCCUPATIONAL COURSE DESCRIPTIONS

**Auto Safety Inspection:** This course prepares Auto Technicians and Service Personnel as Safety Inspectors for motor vehicles. It includes regulations and test inspection procedures and is taught to insure that the student understands the rules and regulations, can inspect a vehicle properly and can successfully pass qualification exams for certification as a Safety Inspector at Licensed Inspection Station.

**Basic Horticulture:** A course designed to familiarize participants with the fundamentals of soil fertility, the principles of attractive home landscaping, the characteristics of various ornamental plants suitable for home landscaping, vegetable gardening, plant maintenance, and small greenhouse structures.

**Cardiopulmonary Resuscitation:** A special class dealing with the various techniques of cardiopulmonary resuscitation.

**Computer Applications:** Integrated programs which combine functions usually found in stand-alone software such as word processing, data basis, spreadsheets, graphics and miscellaneous functions.

**Desairology:** A course designed for cosmetology students in which they learn to prepare the deceased's hair and make-up.

**Effective Teacher Training:** A required course for teacher assistants and substitute teachers.

**Electrical Contractor License Renewal:** A course designed to update electrical contractors on the new codes and provide the six hours of continuing education needed for annual license renewal.

**Emergency Medical Technician (EMT):** A more detailed course than standard first aid with emphasis on the development of skill in recognition of systems of illness and injuries and proper procedures of emergency care. Emphasis on demonstration and practice as a teaching method. Ten hours of in-hospital observations are included.

**Emergency Medical Technician Intermediate (EMT-I):** An EMT-I will learn to perform the following under the direction of a physician at a sponsor hospital: to insert an esophageal airway; establish peripheral venous access; obtain venous blood sample for laboratory analysis; administer medications on EMT-I formulary; and utilize advanced life support equipment on EMT-I performance list.

**EPA Refrigerant Recovery/Recycling Certification:** A course to certify anyone who services or repairs air conditioners or refrigerants.

**Firefighter I Certification:** This is a series of classes to obtain Firefighter I Certification. Students must successfully complete the required group of courses before receiving certification.

**Firefighter II Certification:** The course is a series of classes required to obtain Firefighter II Certification. Students must successfully complete the required group of courses before receiving certification as a Firefighter II.

**First Aid:** This course is taught by an approved American Red Cross instructor and is open to anyone interested in learning how to care for the victims of an accident or illness. Topics covered include bandage application, use of tourniquets and temporary splints, care of eye and burn injuries, artificial respiration, and safe use and storage of medicines. Students completing the course are certified by the American Red Cross.

**Funeral Service Training:** An annual variety of topics relating to funeral service personnel to meet continuing education requirements of the North Carolina State Board of Mortuary Science. Each topic is of five hours duration.

**General Contractor's Seminar:** A course designed to help those wishing to take the North Carolina General Contractor's Exam. This course helps students to become familiar with the latest code revision and standard practices in construction.

**Inservice Classes:** Inservice classes are offered to various groups who are required to complete annual inservice training. Examples are electrical contractors, tanning bed, day care workers, nursing assistants, etc.

**Manicure:** This course provides instruction and clinical practice in manicuring, nail building (application and maintenance of artificial nails) and pedicuring. The course content includes nail anatomy, disorders of nails, and irregularities of nails.

**Medical Terminology:** A course designed to build a workable medical vocabulary for office and hospital clerical personnel. Terminology commonly used in the medical setting will be presented. Hours of course flexible to needs.

**Methodology for EMS/Fire Instructors:** This course is designed to prepare the student to teach adults and to understand the adult learner. Participants will learn how to prepare teaching outlines and organize practical skills.

**Multimedia First Aid:** A course covering the same topics but using American Red Cross films for demonstration followed by actual practice of the techniques by the students.

**National Electric Code:** This course is provided for those who wish to study the National Electric Code in preparation for the licensing examination. Instruction will include the latest code revisions, safety measures and standard practices in the wiring of single and multi-family dwellings, commercial establishments and industrial locations.

**Notary Public:** This 4-hour class is designed to prepare a participant to be commissioned as a Notary Public with the State of North Carolina. Topics to be covered are requirements for collecting fees, general powers and limitations, oaths and affirmations, depositions, affidavits, and negotiable instruments. Participants must reside or work in the state of North Carolina, read and write English, and purchase the approved manual Notary Public Guidebook.

**Nursing Assistant I:** A program designed to give instruction and practice in basic bedside care of the sick, especially the hospitalized patient. Basic procedures such as bathing, bedmaking, taking vital signs, collecting specimens, feeding the patient, moving, lifting, and positioning the patient are included. The class consists of lectures and laboratory work in addition to some clinical practice in a local hospital.

**Nursing Assistant II:** This course prepares graduates to perform more complex skills such as infection control, elimination procedures, care of established ostomies, intravenous site care, and observation and maintenance of oxygen therapy. The course includes class, laboratory and clinical learning experiences.

**Paramedic:** This course is designed to develop knowledge and skills for the advanced emergency care of ill or injured persons. This course follows the DOT guidelines.

**Practical Welding:** Students will be given basic practice in all types of welding procedures and flame-cutting methods which are associated with mechanical and farm repair work. Safety procedures are stressed throughout the course in the use of tools and equipment.

**Tanning Bed Operator Training:** In this course, students will be taught North Carolina regulations. Re: tanning booths, skin and ultraviolet radiation, FDA requirement for manufactures, FDA product labeling standards, tanning bed operator training and tanning bed facility operations.

## BASIC SKILLS PROGRAMS

The Basic Skills Programs provide a variety of educational experiences for adults by guiding them in the development of individual strategies to improve the necessary skills for coping with change in today's complex society.

Striving to meet the spectrum of needs of the College and the community, the staff of the Basic Skills Programs provides flexibility within each program. The goal of the department is to assist participants as they strive to become independent learners and productive citizens.

Educational, cultural, economic, and social needs are considered when students apply for various programs. Class sites are on campus and at various locations in Cleveland County.

Following are the programs and services available through the Basic Skills Programs:

Adult High School Diploma Program
Adult Basic Education Program
G.E.D. Preparatory Program
Learning Lab Programs
Human Resources Development Program
English As A Second Language
Compensatory Education Program

Adults, eighteen years of age or older, desiring to make application for any of the Basic Skills Programs should contact the appropriate departments for additional information.

## ADULT BASIC EDUCATION PROGRAM
### (Grades 1-8)

Adults who have less than a high school education may enroll in the Adult Basic Education Program. The program includes instruction in reading, writing, mathematics, social studies, science, and health education. In each of these areas, instruction is designed to assist students in meeting adult responsibilities by improving fundamental skills. Learning opportunities range from instruction for those who have received no formal education to those who have received as much as eight years of instruction.

Classes are organized into two groups. The first group is for those who need individual instructional guidance in basic reading and writing skills. In the second group, instruction is offered in reading and writing at a more advanced level than that of group one. The second group also receives instruction in basic science and social studies.

With successful completion of the subject matter taught in group two, the student may then advance into the high school program.

Students may enter ABE classes at any time. In order to take advantage of the complete program being offered, the College encourages students to maintain attendance in these classes over a period of several school semesters.

There is no fee for ABE classes or ABE books and materials. Classes are held on campus and at various locations throughout the county.

## ADULT HIGH SCHOOL DIPLOMA PROGRAM
### (Grades 9-12)

The Adult High School Program is a cooperative program between the College and the local school systems. It is available to adults who achieve a 9.0 on the basic skills placement evaluation and wish to complete the high school program. The successful completion of twenty units and a passing score on the North Carolina Competency Test are required for graduation from the Adult High School Program. Any previously earned high school units are accepted toward the total requirements. The remaining requirements will be completed through a prescribed educational plan which incorporates mastery learning skills. The program is free, although there may be a small fee for some textbooks at some class locations. A graduation fee is charged to each student completing the high school requirements. Graduates will be issued a diploma and may participate in the College's graduation exercise.

Adult High School students may arrange a schedule to complete high school through the Learning Lab program or the classroom program on campus, or at various locations throughout the county. Interested persons may enroll in the Adult High School Program at any time.

Requirements for graduation include the following:

| | |
|---|---|
| English | 4 units |
| Social Studies | 3 units |
| Mathematics | 3 units |
| Science | 3 units |
| Electives | 7 units |
| N.C. Competency Test (Passing Scores) | |

Upon completion of the Adult High School Program, graduates may apply to enroll in one of the curriculum programs at Cleveland Community College or some other college.

# GENERAL EDUCATIONAL DEVELOPMENT (GED) PREPARATORY

The GED (high school equivalency) Preparatory Program is designed for adults preparing to take the GED examination. After the administration of the required Pre-GED examination, each student's academic skills are evaluated to determine specific instructional needs. The student primarily studies in the areas of English, reading, and math. After achieving specific skills and knowledge, the student is prepared to take the GED examination.

# LEARNING LAB PROGRAM

The Learning Lab, located on the campus, includes the free high school program in addition to the free General Interest Programs. General Interest Programs are available for adults who have already completed high school or college work but who want to continue their educational development in a non-credit curriculum.

For their own self-improvement and personal interest, many community residents choose self-instructional courses such as reading improvement, math, or English.

Because there are no organized classes in the Learning Lab, the staff will assist the student in arranging a study schedule to meet his or her needs. The student may attend the hours and days which are most convenient for him or her. The Learning Lab is open from 8:00 AM to 10:00 PM, Monday through Thursday, and 8:00 AM to 4:00 PM on Friday.

# HUMAN RESOURCES DEVELOPMENT PROGRAM

The Human Resources Development Program provides prevocational training and counseling for unemployed and underemployed adults. Upon graduation, participants receive assistance with job placement or opportunities for skills training.

The goal of the Human Resources Development Program is to prepare persons for successful performance in the work force. The primary objective of the program is to reduce unemployment and underemployment by making it possible for the participants to become and remain productive employees.

Students in the Human Resources Development Program enroll for approximately four weeks of instruction. The curriculum includes an orientation to the workplace, instruction in reading, writing, arithmetic, Job Search, and human relations skills which are essential to securing and maintaining employment. In addition, short-term skill training in basic office applications and cashier/customer service is provided.

Classes are held on campus from 8:30 AM to 3:00 PM, Monday through Friday. Off-campus classes may be arranged on a short or long-range schedule as needed.

## ENGLISH AS A SECOND LANGUAGE

English language for the foreign born is taught as written English and as conversational English. Classes are free of charge to those seeking English language skills and citizenship instruction. Classes are available for refugees, migrant workers, and other aliens.

## COMPENSATORY EDUCATION PROGRAMS

The Compensatory Education Program provides classes in basic education, socialization, and community living skills for the adult mentally retarded.

This program is a cooperative effort through Cleveland County Mental Health, Cleveland Vocational Industries, Inc., Cleveland Community College, and other service provider agencies.

Certification of mental retardation is required prior to enrollment.

## SMALL BUSINESS CENTER

The Small Business Center of Cleveland Community College provides workshops, seminars, counseling, information and referral services for small business owners and operators in Cleveland County. The Center's objectives are:

- To provide accessible and flexible training programs for small business operators including workshops, seminars, and continuing education courses.
- To provide a resource center of print and non-print reference materials for use by small business operators and employees.
- To offer special assistance to small business owners and would-be owners via a network of referral services to the chambers of commerce banks, the Small Business Administration, and other agencies such as the Department of Commerce.
- To offer consultative services on a direct one-to-one basis.

A variety of seminars have been presented including Managing Customer Complaints, Time Management, Effective Selling, Low Cost Advertising, Telephone Professionalism, and Tax Reform. For more information call the Small Business Center Director at 484-4040.

## LIBRARY AND AUDIOVISUAL SERVICES

Monday - Thursday     7:30 am - 10:00 pm
Friday     7:30 am - 4:00 pm
Semester break and holidays as posted

The Cleveland Community College Library is a multimedia facility designed to support the total educational program of the College and to enhance the teaching/learning experience for students, faculty,

administration and community patrons. The Library contributes to the educational program of the College by collecting, making readily available, and assisting in the use of materials needed by its users.

The collection includes print, video, sound recording and multimedia resources. Access to these materials is provided through CCLINC (Community College Libraries In North Carolina), a joint database of 39 community college libraries. Patrons using the Library at Cleveland have access to a combined library collection that is third in size among libraries of publicly supported institutions of higher education in North Carolina.

The Library subscribes to approximately 300 periodicals and provides numerous CD-ROM and on-line indexes and databases (including NC Live) for individual research. Computerized interlibrary loan services is available to expedite the delivery of materials from other locations. Library staff members teach classes in information literacy and provide individual assistance with the use of learning resources.

The Audio-Visual Services Department performs many support functions for faculty and staff, including lamination, production of overhead transparencies, and licensed off-air taping of educational telecourses, teleconferences and resource programming. This department maintains up-to-date equipment, including portable equipment for classroom use and a campus-wide closed circuit TV system.

# CLEVELAND COMMUNITY COLLEGE

## BOARD OF TRUSTEES

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Hoyt Q. Bailey, Vice Chairman
Dr. L. Steve Thornburg, Secretary

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R. Howard Bryant (1999)    Dr. L. Gene Yarboro (2001)

### STUDENT GOVERNMENT ASSOCIATION PRESIDENT (EX-OFFICIO)

Deborah D. Camp (1998-1999)

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Joe Goforth, Vice Chairman
Dr. Steven Skorman, Secretary
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John E. Young
John F. Schenck, III
Dr. L. Steve Thornburg
U.L. "Rusty" Patterson, III
    (Executive Director)
Severne Budd
    (Recording Secretary)

# PERSONNEL OF THE COLLEGE
## (FULL-TIME)

## OFFICE OF THE PRESIDENT

President . . . . . . . . . . . . . . . . . . . . . . . . . . . . .L. Steve Thornburg (1990)
    B.A.J., University of North Carolina at Chapel Hill
    M.P.A., University of North Carolina at Chapel Hill
    Ed.D., North Carolina State University in Raleigh

Secretary to the President . . . . . . . . . . . . . . . . .Pat Anderson (1981)
    Appalachian State University
    Cleveland Technical College
    B.A., University of South Carolina at Spartanburg

## GENERAL ADMINISTRATION

Assistant to the President,
Planning and Institutional Effectiveness . .Dorothy P. McIntyre (1970)
    A.A., Gardner-Webb College
    B.A., Limestone College
    M.A., University of North Carolina at Charlotte
    Ed.S., Appalachian State University
    CAGS, Ed.D., Virginia Polytechnic Institute and State University

Executive Director of the Foundation . . . . . .U.L. Patterson, III. (1997)
    A.S., Wingate Jr. College
    B.A., Wofford College

Secretary, Foundation . . . . . . . . . . . . . . . . . . . . .Severne Budd (1992)
    B.S., Livingstone College

## FINANCE/ADMINISTRATIVE SERVICES

Vice President, Finance/
Administrative Services . . . . . . . . . . . .Tommy C. Greene (1983-1992)
    A.A., Cleveland Technical College                (1999)
    B.A., Limestone College
    M.B.A., Winthrop College

Comptroller/Office Manager . . . . . . . . . . . . . . . . . .Jane Webb (1965)
    Southern Business College
    A.A.S., Cleveland Community College

Accounting Technican . . . . . . . . . . . . . . . . . . . . .Susan Greer (1994)
    A.A.S., Cleveland Community College

Director, Campus Security . . . . . . . . . . . . . . .Clyde Q. Adams (1994)
    24 years experience with Shelby Police Department

Purchasing Officer . . . . . . . . . . . . . . . . . . . . . . . . . . . .Kay Allen (1979)
    A.A.S., Cleveland Community College
    B.S., Limestone College

Manager, College Store . . . . . . . . . . . . . . . . . .Lydia McSwain (1986)
    A.A.S., Cleveland Community College

Printshop Technician . . . . . . . . . . . . . . . . . . . .Danny Dedmon (1986)
    A.G.E., Cleveland Technical College
    B.A., Limestone College
    M.S., North Carolina A&T State University

Receptionist . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .Pat Eaker (1995)

Cashier/Secretary . . . . . . . . . . . . . . . . . . . . . . . .Donna Griggs (1995)
    A.A.S., Cleveland Community College

Secretary/Purchasing Assistant . . . . . . . . . . . . . .Lisa Hamby (1995)
    A.A.S., Cleveland Community College

Evening Receptionist . . . . . . . . . . . . . . . . . .Sandy W. Borders (1998)
    Cleveland Technical College

Director, Information Systems/Personnel . . . .Hugh Walker, Jr. (1973)
    B.S., North Carolina State University
    M.A.Ed., Western Carolina University
    Appalachian State University
    A.A.S., Cleveland County Technical Institute

System Administrator . . . . . . . . . . . . . . . . . . . . .Phyllis Haynes (1985)
    A.A.S., Cleveland Technical College
    Gardner-Webb University
    University of North Carolina at Charlotte

Network Administrator . . . . . . . . . . . . . . . . . . . . . .Robin Dyer (1994)
    A.A.S., Cleveland Community College
    B.S., Gardner-Webb University
    Applachian State University

Microcomputer Technican . . . . . . . . . . . . . . . . . . .Bruce Wilson (1997)
    A.A.S., Cleveland Community College
    B.A., Gardner-Webb University

## INDUSTRY AND COMMUNITY SERVICE

Vice President, Industry/
Community Service . . . . . . . . . . . . . .David M. (Pete) Stamey (1973)
    B.S., North Carolina State University
    M.A., Western Carolina University
    Ed.S., Western Carolina University

Director, Occupational Extension . . . . . . . . . . .Barbara Greene (1989)
    B.S., Gardner-Webb College
    M.A., Gardner-Webb College

Director, Small Business Center . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .

Chief Examiner, GED . . . . . . . . . . . . . . . . .William (Bo) Jones (1973)
    A.A.S., Cleveland Technical College
    B.S., Western Carolina University

Dean, Basic Skills Programs . . . . . . . . . . . . .Rebecca K. Cook (1970)
    A.A., Gardner-Webb College
    B.A., Appalachian State University
    M.Ed., University of North Carolina at Charlotte

Program Coordinator, Basic Skills Programs . . . . . . . .Jan Neal (1994)
    B.S., Gardner-Webb University

Instructor/Coordinator, Basic Skills Programs . . .Carolyn Petty (1979)
    A.A.S., Cleveland Technical College
    North Carolina A & T University
    Limestone College
    B.S., Gardner-Webb College

Instructor/Coordinator, Basic Skills Programs . . .Nancy Hopper (1976)
    A.A.S., Cleveland Technical College
    B.S., Gardner-Webb College
    Queens College
    M.A., Appalachian State University

Coordinator, HRD Program . . . . . . . . . . . . . . . . .Joyce Hosch (1979)
    A.A.S., Cleveland Technical College
    B.S., Gardner-Webb College

Recruiter/Instructor, HRD Program . . . . . . . . . . .Carolyn Smith (1976)
    A.A.S., Cleveland Technical College
    B.S., Gardner-Webb College

Office Manager/Fire-Rescue Coordinator . . .Nancy W. Carpenter (1981)
    Jr. Secretarial Degree, Kings College
    A.A.S., Cleveland Community College
    Gardner-Webb University

Secretary, Continuing Education . . . . . . . . . . . . .Susan Martin (1990)
    Western Carolina University
    A.A.S., Cleveland Community College
    Gardner-Webb University

Secretary, Small Business Center/
Continuing Education . . . . . . . . . . . . . . . . . . . .Karen Patterson (1994)
    A.A.S., Cleveland Community College

Secretary, Basic Skills Programs . . . . . . . . . . . . . . .Deller Sims (1987)
    A.A.S., Cleveland Community College
    B.S., Gardner-Webb University

Computer Program Coordinator . . . . . . . . . . .Matthew D. Lilly (1998)
    B.S.,B.A., Western Carolina University

## ACADEMIC PROGRAMS

Vice President, Academic Programs . . . . . . . . . .Ronald Wright (1973)
    A.A., Gardner-Webb College
    B.A., Gardner-Webb College
    M.A., Western Carolina University
    Ph.D., University of South Carolina
    Appalachian State University
    Cambridge University

Dean, Arts/Sciences/Public Services . . . . . . . . . .Jean Francis (1971)
    A.A.S., Cleveland Technical College
    B.S., Limestone College
    M.A., University of South Carolina at Spartanburg
    University of North Carolina at Charlotte

Dean, Business Technologies . . . . . . . . . . . . . . .Madge Wray (1971)
    B.S., North Carolina A & T University
    M.A., Winthrop College

Dean, Vocational/
Engineering Technologies . . . . . . . . . . . . . . . . . .Gene C. Cox (1973)
    B.S., Western Carolina University
    M.A., Gardner-Webb College

Coordinator, Prison Programs . . . . . . . . . . . . . .Rosaline Hunt (1976)
    B.S., Fayetteville State University
    Western Carolina University
    M.A., Appalachian State University
    Ed.S., Appalachian State University

Director, Associate Degree Nursing . .Martha Ledbetter-Baskin (1990)
    B.S.N., Winston-Salem State University
    M.S.N., Medical College of Georgia

Director, Academic Support Center . . . . . . . . . . .Renee Allison (1983)
    B.S., Appalachian State University
    M.A., Appalachian State University
    University of North Carolina at Charlotte

Director, Cable Access/Broadcasting
and Production Technology Instructor . .Shellie Hamrick-White (1989)
    B.A., Gardner-Webb College

Director, Library . . . . . . . . . . . . . . . . . . . . . .Barbara McKibbin (1991)
    B.A., Gardner-Webb College
    M.S.L.S., University of North Carolina at Chapel Hill

Librarian, Reference/Public Service . . . . . . . . . .Nettie Durrant (1980)
    B.S., Winston-Salem State University
    M.L.S., North Carolina Central University
    Appalachian State University

Technical Services Librarian . . . . . . . . . . . . . .Elizabeth Stone (1996)
    B.A., Erskine College
    M.L.I.S. University of North Carolina at Greensboro

Library Technician . . . . . . . . . . . . . . . . . . . . . .Shirley Anthony (1976)
    A.A.S., Cleveland Technical College
    B.S., Limestone College

Coordinator, Audiovisual Services . . . . . . . . . . .Danny Morton (1986)
    A.A., Isothermal Community College
    University of North Carolina at Charlotte
    A.A.S., Cleveland Technical College

Office Manager (Adademic Programs) . . . . . . . . . .Lee Bryant (1976)
    A.A.S., Cleveland Community College
    A.G.E., Cleveland Community College

Secretary, Academic Programs . . . . . . . . . . .Phyllis Champion (1987)
    A.A.S., Cleveland Community College

Secretary, Vocational and
Engineering Technologies . . . . . . . . . . . . . . . .Beverly Ponder (1973)
    Gardner-Webb College
    A.S., Kings College

## STUDENT SERVICES

Vice President, Student Services . . . . . . . . . . .Sandra Hardin (1970)
    B.B.A., University of Houston
    M.A.Ed., Western Carolina University

Dean, Enrollment Management . . . . . . . . . . .LouAnn Bridges (1976)
    A.A.S., Cleveland Technical College
    B.S., Gardner-Webb College
    M.A., Gardner-Webb College
    University of South Carolina at Spartanburg

Director, Admissions . . . . . . . . . . . . . . . . . . . . . . . .Alan Price (1976)
    B.S., Western Carolina University
    M.A., Appalachian State University

Admissions Counselor . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .

Public Information Officer . . . . . . . . . . . . . . . . . . .Chris Nanney (1993)
    B.S., Appalachian State University
    M.S., NC AT&T State University

Coordinator, Financial Aid . . . . . . . . . . . . . . . . . .Andy Gardner (1997)
    A.A., Cleveland Community College
    B.S., Gardner-Webb University

Secretary, Student Services . . . . . . . . . . . . . . . .Jennifer Gold (1995)
    A.A.S., Cleveland Community College
    B.S., Gardner-Webb University

Secretary, Financial Aid . . . . . . . . . . . . . . . . . .Sherri Jackson (1994)
    Secretarial Diploma, Kings College
    A.A.S., Cleveland Community College

Secretary, Student Services . . . . . . . . . . . . . .Audrea Johnson (1993)
    A.A.S., Cleveland Community College

Secretary, Student Services . . . . . . . . . . . .Shaunda Leonhardt (1995)
    A.A.S., Cleveland Community College
    A.A., Cleveland Community College
    University of North Carolina at Charlotte

Secretary, Student Services . . . . . . . . . . . . .Suzanne Studioso (1992)
    A.A.S., Cleveland Community College

## HOUSEKEEPING AND MAINTENANCE STAFF

Director, Physical Plant . . . . . . . . . . . . . . . . . . . . . . . .Gene Lail (1993)
Assistant Director, Physical Plant . . . . . . . . . . . . .Danny Moore (1993)
    A.A.S., Cleveland Community College

Maintenance . . . . . . . . . . . . . . . . . . . . . . . . . . . . .James Farris (1995)
Maintenance . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .Bob Ford (1994)

Groundskeeper . . . . . . . . . . . . . . . . . . . . . .Emanuel Campbell (1997)

Housekeeper . . . . . . . . . . . . . . . . . . . . . . . . . . . . .Linda Black (1977)
Housekeeper . . . . . . . . . . . . . . . . . . . . . . . . . . . .Jessie J. Lott (1975)
Housekeeper . . . . . . . . . . . . . . . . . . . . . . . . . . . .Nancy Mintz (1995)
Housekeeper . . . . . . . . . . . . . . . . . . . . . . . .Barbara F. Smarr (1988)
Housekeeper . . . . . . . . . . . . . . . . . . . . . . . . .Dorothy Surratt (1976)
Housekeeper . . . . . . . . . . . . . . . . . . . . . . . . . . .Lucille Wilson (1992)
Housekeeper . . . . . . . . . . . . . . . . . . . . . . . . . .Patricia Wilson (1976)

# FACULTY

Greg Bolich (1993) . . . . . . . . . . . . .Instructor, Psychology/Humanities
    B.A., Seattle Pacific University
    M.C.M., Seattle Pacific University
    M.A., Western Evangelical Seminary
    M.Div., Western Evangelical Seminary
    Ph.D., Gonzaga University
    Ph.D., The Union Institute

Barry Boyles (1998) . . . . . . . . . . . . .Instructor, Anatomy & Physiology
    B.A., Lenoir-Rhyne University
    D.C., Life Chiropractic College

Jana Bridges (1992) . . . . . . . . . .Instructor, Academic Support Center
    B.S., Applachian State University

Hal Bryant (1975) . . . . . . . . . . . . . . . . . . . . . . . . . . . . .Instructor, Art
    B.A., Gardner-Webb College
    M.A., University of South Carolina at Columbia

Starr Morrow Camper (1992) . . . . . . . . . . . . . . . . . .Instructor, History
    A.A., Isothermal Community College
    B.A., University of North Carolina at Charlotte
    M.A., University of North Carolina at Charlotte
    Doctoral Studies, University of South Carolina at Columbia

Pam Collins (1993) . . . . . . . . . . . . . .Instructor, Information Systems
    B.S., East Carolina University
    M.A., Appalachian State University

Joe Collum (1992) . . . . . . .Program Coordinator, Plumbing/Carpentry
    Cleveland Community College
    10 years experience in construction

Joanne Cox (1991) . . . . . . . . . . . . . . . . . . . . . .Instructor, Chemistry
    B.A., Shippensburg State College
    M.A., Shippensburg State College

Rebecca Crawford . . . . . . . . . . . . . . . . . . . . . . . . .Instructor, Biology
    B.S., Appalachian State University
    M.S., University of North Carolina at Charlotte

Debra P. Duncan (1998) . . . . . . .Instructor, Associate Degree Nursing
    R.N., Western Piedmont Community College
    B.S.N., Winston-Salem State University
    Certified Psychiatric Mental Health Nurse by ANCC

Susan Findlay (1994) . . . . . . . .Program Coordinator, Early Childhood
    B.S., Virginia Polytechnic Institute and State University
    M.A., Gardner-Webb University

Ray Fisher (1977) . . . . . . . . . . . . . . . . . . . . . . . . Program Coordinator,
Electrical/Electronics Technology
    A.A., Gaston College
    B.S., Western Carolina University
    Lisensed Electrical Contractor
    30 Years Electrical Experience

Theresa Gauthier (1996) . . . . . . . . . . . . . . . . Instructor, Mathematics
    B.A., University of Missouri at Kansas City
    B.A., University of North Carolina at Charlotte
    M.A., University of North Carolina at Charlotte

Woodrow Glenn (1976) . . . . . . . . Instructor, Business Administration
    B.S., Gardner-Webb College
    M.A., Appalachian State University
    Western Carolina University

Kelly Grant (1997) . . . . . . . . . . . Instructor, Associate Degree Nursing
    B.S.N., UNC Charlotte
    M.S.N., Case Western Reserve University
    C.N.M., Frontier School

Sherry Hamrick (1993) . . . . . . . . . . . . . . Instructor, Practical Nursing
    B.S.N., University of North Carolina at Charlotte
    B.A., Appalachian State University
    University of North Carolina at Greensboro

Irene Henline (1995) . . . . . . . . . . Instructor, Associate Degree Nursing
    B.S.N., Lenior Rhyne College
    M.S.N., University of North Carolina at Greensboro

Julie Holt (1992) . . . . . . . . . . . . . . . . . . . . . . . . Instructor, Accounting
    B.S., East Tennessee State University
    M.Accountancy, East Tennessee State University

Kenny Howell (1996) . . . . . . . . . . . . . . . . . . . . . . Instructor, Plumbing
    A.A., Isothermal Community College
    B.A., Warren Wilson College
    Cleveland Community College

Mark Hughes (1996) . . Instructor, Electronics Engineering Technology
    A.A.S., Gaston College
    B.S., Southeastern Oklahoma State University
    M.Technology, Southeastern Oklahoma State University
    Clemson University

Linda Kay Johnson (1998) . . . . . Instructor, Associate Degree Nursing
    B.S.N., Clemson University
    M.S.N., University of North Carolina at Greensboro

Katherine Jones (1975)  . . . . . . . .Department Head, Practical Nursing
    A.A., Gardner-Webb College
    R.N., Rex Hospital School of Nursing
    B.S.N., North Carolina Wesleyan College
    M.S.N., East Carolina University

Kelvin King (1997) . . . . . . . . . . . . . . . . . . . . . . . . .Instructor, English
    B.A., Miami University (OH)
    M.A., Miami University (OH)
    University of Iowa
    University of Montevallo

Jody Ledford (1989) . . . . . . . . . . . . . .Instructor, Information Systems
    B.S., Gardner-Webb College
    M.A., Gardner-Webb College
    Applachian State University

Doug Lovelace (1993)  . . .Instructor, Industrial Management Technology
    B.S., Auburn University
    M.B.A., University of Richmond

Wilbur McBride (1975)  . . . . . . . . . . .Instructor, Physics/Mathematics
    B.A., Wofford College
    M.A.Ed., University of North Carolina at Chapel Hill
    University of Arkansas, University of Michigan
    University of Kansas, New Mexico State University
    University of North Carolina at Chapel Hill

Fred McFarland (1970) . . . . . . . . . . . . . . . . . .Instructor, Accounting
    A.A., Gardner-Webb College
    B.A., Carson-Newman College
    M.A., Appalachian State University

Mike McSwain (1983)  . . .Instructor, Electronics Engineering Technology
    A.A.S., United Electronics Institute
    B.S., Western Carolina University

Bruce Mack (1996)  . . . . . . . . . . . . . . . . . . . . . .Program Coordinator,
                             Mechanical Drafting Technology
    A.A.S., Gaston College
    B.S.T., University of North Carolina at Charlotte

Joyce Meade (1973)  . . . . . . . . . . . . . .Department Head-Accounting,
                Business Administration, Office Technologies
    B.S., University of North Carolina at Greensboro
    M.A., Winthrop College

Jean Mitchell (1976)  . . . . . . . .Instructor, Office Technologies/Medical
    B.S., North Carolina Central University
    M.A., Appalachian State University

Hilda Moore (1991) . . . . . . . . . . . . . . . . . . . . . . . .Instructor, Spanish
    B.A., Gardner-Webb College
    M.A.T., Appalachian State University

Charles Nanney (1997) . . . .Program Coordinator, Machining Technology
    Cleveland Community College
    A.A.S., Gaston College
    Western Carolina University

Claman Parker (1989) . . . . . . . . . . . . . . . . . . . . . .Instructor, Carpentry
    10 years experience in carpentry

Frank Polk (1992) . . . . . . . . . . .Program Coordinator, Criminal Justice
    B.A., Appalachian State University
    24 years experience in the U.S. Army Special Forces
    Winthrop University

Frank Pullen (1971) . . . . . . . . . .Instructor, Health/Physical Education
    B.S., North Carolina A & T University
    M.A., University of Rhode Island
    Rhode Island College
    Appalachian State University

Robert Putnam (1984) . . .Instructor, Electrical/Electronics Technology
    North Carolina Vocational Textile School
    32 years electrical experience
    B.S., Western Carolina University

Steve Putnam (1997) . . . . . . . . . . . . . . . . . . . .Instructor, Networking
    B.S., Gardner-Webb University
    M.A., Appalachian State University

Roger Randall (1979) . . . . . . .Program Coordinator, Auto Body Repair
    National Institute Automotive Service Excellence Certification
    32 years experience in automotive service
    B.S., Western Carolina University
    ASE Certified Master Technician
    I-Car Certified

Phil Reid (1993) . . . . . . . . . . .Department Head, Information Systems
    B.S., Gardner-Webb University
    M.A., Applachian State University

Maxine Romney (1976) . . . . . . . . .Instructor, Business Administration
    B.B.A., City University of New York
    M.Ed., Northeastern University

Linda Ross (1978)  . . . . . . . . . . . . .Instructor, Business Administration
    L.P.N Diploma, A.A.S., Cleveland Technical College
    B.A., Limestone College
    M.S., North Carolina A & T University
    North Carolina State University
    Winthrop College
    Center for Creative Leadership Certificate

Becky Parrish-Sain (1990)  . . .Program Coordinator, Marketing/Retailing
    A.A.S., Cleveland Technical College
    B.S., Winthrop College
    M.A., Gardner-Webb University
    University of North Carolina at Charlotte

JoAnn Schilling (1977)  . . . . . . . . . . .Department Head, Radiography
    R.T., Lewis-Gale Hospital School of Radiologic Technology
    B.G.S., University of South Carolina
    M.A.Ed., Western Carolina University
    Ed.S., Appalachian State University

Danny Scruggs (1983) . . . . . . . . . . . .Instructor, Information Systems
    B.S., Appalachian State University
    M.A., Appalachian State University
    A.A.S., Cleveland Community College

Joseph M. Southards (1981)  . . . . . . . . . . . . . . . .Department Head,
    B.S., Gardner-Webb College              Mathematics and Science
    M.A., Appalachian State University

Barbara Taylor (1974) . . . . . . . . . . . . .Department Head, Liberal Arts
    B.S., Mississippi University for Women
    M.A., Appalachian State University
    University of Southern Maine
    University of South Carolina

Dale VanPelt (1998)  . . . . . . . . . . . . . . .Instructor, Air Coniditioning,
    Diploma, Gaston College               Heating, & Refrigeration

Tom Whitaker (1993) . . . . . . . . . . . . . . . . . . . . . .Instructor, Welding
    Welding Diploma, Isothermal Community College
    Machine Shop Diploma, Isothermal Community College
    Western Carolina University

Julie Wight (1998) . . . . . . . . . . . .Program Coordinator, Fire Protection
    B.S., University of North Carolina at Wilimington
    M.S., Kansas State University
    Oklahoma State University
    University of Kansas
    Louisana State University
    Florida State Fire College
    National Fire Academy
    OSHA Institute
    Emergency Management I

Tim Wisher (1994) . . . . . . . . . . . . . . . .Program Coordinator, Welding
    Certificate-Welding, Cleveland Community College
    Certificate-Blueprinting, Spartanburg Technical College
    Certificate-Confined Space Entries, Sanders Brothers

B.J. Zamora (1996) . . . . . . . . . . . . . . . . . . . . . . . . . .Instructor, English
    B.A., University of Texas at Austin
    M.S., Corpus Christi State University
    Ph.D., University of Pittsburgh

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